THE GENESEE FARMER.

Agriculture is the most Healthy and Honorable, as it is the most Natural and Useful pursuit of Man.

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OUR CAUSE AND OURSELVES.

Every one must have observed the progress of Agricultural Improvement during the last TWENTY YEARS. The history of no century since man left that best of farms, in which "grew every tree that was pleasant to the sight and good for food," exhibits such a rational and rapid progress in the art that feeds the world. Farmers are fast becoming reading and thinking men — they are fast laying aside old prejudices and notions and signs, and are beginning to realize that common sense and intelligence can be as profitably and as honorably employed in cultivating a farm — an orchard — a garden — or in caring for the creatures over which God has given man dominion — as in any other pursuit of life. The appearance of farms and houses, barns and stables, gardens and orchards, in almost every neighborhood, proclaim this improvement, in language not to be misunderstood by the most careless observer. The slovenly, ill-managed, unproductive farm of other years, has been succeeded by one that is both a source of pride and profit to its possessor. The barns and dwellings whose loose boards were shaken like reeds by the wind, have given place to others that afford safety to the crops and comfort to the inmates. The "yard," so unsightly to behold, — the receptacle of refuse and rubbish, has in many cases been transformed into the flower-garden, or lawn, delighting the beholder with beauty and fragrance, and denoting the improved taste and increased happiness of the owners.

This progress in agriculture is doing much to improve the unstable and roving disposition of our people. A well kept garden and orchard, next to wife and children, gives home its charm. To him who loves his garden, or orchard, or farm, every plant — every tree, — is a friend with whom he communes. He has watched over its infancy — supported it in its weakness — given food in the time of need, and water when it was parched with thirst. He has curbed its disposition to ramble, and under his guidance it has grown up with a fine form and good habits. In return, it has poured into his lap its offering of gratitude. It has delighted him with its beauty and fragrance; and, as if this was not enough, it is daily inviting him to partake of its fruits. A man who thus erects Nature's temple around his home, and worships her there, will not be apt to relinquish those pleasures for a "*new home*" in a strange land, or the *gold of California*; and should stern duty ever compell him to desert the much loved spot, it will be dear to his memory. He will often say in spirit —

> "An exile from home, splendor dazzles in vain,
> And I sigh for my lonely thatched cottage again."

This gratifying improvement has been effected in a great degree by the Agricultural and Horticultural periodicals. And we think we can with propriety say that the Genesee Farmer has done its share of the work. Its low price has given it an unprecedented circulation, and thrown it into thousands of families where light was needed. The ability of its writers and correspondents, who are practical men, have given it a reputation as a reliable Farmer's Journal. This, together with its convenient form for binding, has secured it a place in almost every Farmer's Library.

Our present volume we intend to make more attractive and more valuable. We shall endeavor particularly to improve our Youth's Department. We shall endeavor to interest, and while interesting, instruct the Youth.

Parents should teach their *children* to love and practice gardening. It will learn them system and order, patience and hope; it will give strength to the body and the mind; it will improve the head and the heart. It will teach them self-reliance — that success is the reward of industry and perseverance, while failure is the result of negligence. It will teach them to

> "Look from Nature up to Nature's God."

What affords pleasure like visiting the scene of our childhood, and there beholding, growing in majesty and pride, the trees we planted in our childish glee. What music so sweet as the shouting of the tempest in their lofty tops.

We shall endeavor to enforce this duty in our Ladies' Department, as also to urge upon our fair readers the necessity of devoting a portion of their own time to gardening. It will not only afford pleasure, but health. It will furnish the luxuries — the poetry of life, and the health essential to their enjoyment. Work among your flowers and plants every day during the season; it is the best cosmetic in the world — it will drive away that sallow, billious look. It will give you a color more beautiful, more lasting than rose or carmine. It will send the glow of health to the cheek, and joy to the heart.

With these few remarks on the progress of the cause in which we are engaged, and ourselves in particular, we wish our friends a Happy New Year.

THE STUDY OF AGRICULTURE.

THE commencement of a new year is a capital time for every young farmer to begin the systematic study of his profession. No matter how thoroughly he fancies that he has already investigated all the phenomena of tillage, the growth of crops, and the feeding and improvement of domestic animals; in each of these departments there are many important truths which he and all others have yet to learn. No person of common understanding ever sought earnestly after useful knowledge, who did not gain something truly valuable for his labor. The rewards of study, when directed to noble objects, and good purposes, are certain. Successful agriculture, by which mankind are both fed and clothed, and the land made better, from year to year, is the basis of all social, all moral, and all intellectual improvement. Pursue the opposite course, deteriorate the soil, and you inevitably compel the whole community to give more and more labor for their daily food and necessary clothing.—You force them to separate farther and farther from each other's habitation, and ultimately to devote the time of all to the one pursuit of supplying the first wants of their common nature. The cultivation of a badly exhausted soil exclusively, from which much is needed by society, and little obtained, must check all progress in learning, science and the arts, by compelling every human being to give a great deal of the "sweat of his face," for a mere subsistance. We repeat the idea, that an *improving system* of tillage and farm economy, is the only true basis of all human elevation. The soundness of this position being conceded, it follows as a legitimate corollary, that agriculture conducted in obedience to the laws of nature, is the great hope of the world—the paramount interest of all of woman born.

It is not, then, to remove the tedium of an idle hour that one should study the natural laws which govern the results of rural industry. There is a higher purpose to be attained, a far nobler object near at hand, and within the reach of every studious mind.

The laws which God has appointed to regulate the growth of plants and animals on the surface of the globe, can only be wisely interpreted, by the careful analysis of all known facts which relate to the organization and disorganization of these living beings.

These *facts* and the *things* to which they belong, must be critically examined separately, and in all their natural relations one to another. It is an intimate knowledge of all the known things and known facts that pertain to agriculture, which makes one a scientific farmer. This knowledge comes not by intuition. It is the rich recompense of experience guided by sound reason and mental labor. Not only the muscles, but the mind of man must make an effort before it is possible to develop the natural powers with which its Creator has endowed it. The awaking of sleeping thought, the encouragement of young reason to exert its faculties and apply them to the patient investigation of natural phenomena, as they really present themselves in all farming operations, are the ends aimed at by much of what we write for the agricultural press. If we could by any means persuade every reader of the Farmer to study the slight difference which often exists between a good soil and a poor one, or a productive and an unproductive one, we should probably be the happiest man in America.

No fact is better established by human testimony, than that 100 pounds of common plaster of Paris (sulphate of lime) has added 2000 pounds to a crop of clover, grown on an acre of land. On this acre there are 43,560 square feet; and to descend no more than 12 inches into the subsoil, in estimating the whole weight of the earth concerned in making the crop, there are at least 4,356,000 pounds of solid matter, besides the 100 pounds of gypsum on the acre. Clearly the whole difference in a soil which produces 1000 lbs. of clover hay to the acre, and one that yields 3000 lbs. is, that the latter contains *one part in forty-three thousand five hundred and sixty of a particular salt*, more than the former. This salt contains less than 22 lbs. of sulphur; and less than 50 lbs. of lime in 100, the balance being water of crystalization, and oxygen combined with sulphur to form sulphuric acid, or oil of vitriol. On soils that contain more than a pound and a half of lime to the cubic foot, or some ten thousand grains, the addition of fifteen grains of plaster to the square foot, or 100 pounds of soil, produces a decided effect on its fertility. Now, it is by no means necessary to determine in what way this fertilizer operates to augment the crop, to render the demonstration complete that an extremely slight change in the condition of a soil is adequate to produce a remarkably large difference in its productiveness.

One hundred pounds of guano have given an increase of 40 bushels of corn in one field; and a gain of 100 of potatoes in another. That the atoms in this powerful fertilizer create any new ones in the soil or in the atmosphere above it, or that they furnish all the atoms in the crop of corn or potatoes, is not to be supposed.

The most obscure point in these interesting phenomena is, how 20 lbs. of available sulphur and a like weight of available phosphorus should give an addition of 40 lbs. of each of these elements of bread and meat, to a single crop, after their application in gypsum and ground bones.

We find on a critical analysis of clover, that the 2000 lbs. grown by 100 of plaster, contain twice as much sulphur as the plaster when applied to the land. We can only account for this fact by saying that available sulphur being in the soil but in a deficient quantity, the supply of a little more to the growing plants enables them to extend their roots deeper and wider into the earth, and thus imbibe sulphur-salts as well as other aliment, from a great distance. In other words, as the land gives a small crop of clover or grain without plaster, it must contain a little of all the things demanded by nature to organize said crop. Being, however, diluted and widely diffused in the mass of sand, clay and iron, the roots of small, feeble plants can imbibe but few of the fertilizing atoms which really exist in the surface and subsoil, from inability to reach them, without the aid of additional food to develope and extend the roots of those dwarfed beings. It is our opinion that starved plants uniformly fail to consume more than a fourth of the elements of bread and meat present in the soil, and that many of these dissolved atoms are needlessly lost to the husbandmam, from the lack of a little timely nourishing of the crop, when plants are from four to ten weeks of age, and forming their tissues.

In agriculture, much depends on times and seasons, as well as on tillage and seed. A rain in summer, is called a "season" at the South; as without *timely* rain, the hope of the corn-grower is blasted.

A slight affair often changes the hygrometic power of soils. The increased condensation of dews and of gases, and the greater facility for the descent of water into the presence of the various soluble and fertilizing salts in the subsoil, and for the free ascent of water thus charged with the food of crops, upward and around the roots of needy plants, are all matters worthy of profound study. Draining and irrigation in all their bearings on rural economy, are far from being either well, or generally understood. We find that a gallon of the limpid water in the dry season of summer taken from the Genesee river, contains as much of the elements of wheat as twelve gallons of the water taken from the Savannah where it falls over the granite rock a few miles above Augusta.

What rain and snow water extract from soils and earths, and what this liquid takes with it into the circulation of growing plants, are points to which the writer has devoted considerable attention. Nothing more forcibly indicates both the wisdom and goodness of Providence than the fixed solubility of all the atoms appointed to build up the bodies of all vegetables and animals.

Change in a slight degree the *insolubility* of the shell of an oyster in the water of the sea, while the animal lives, and the speedy extinction of the race would soon follow. Render the elements of this shell equally insoluble in sea-water before the oyster imbibes the dissolved atoms, to form its stony covering, and no such protection could be had. If the earthy elements in the bones of a child, which are dissolved in the milk of its mother, remained equally soluble in the skeleton of her offspring, it could never stand nor sit up a moment in its life; nor could it long survive the absence of all bones, whether to protect its brain and heart, or for use in locomotion.

If for no other purpose, the science of agriculture should be studied for its humanizing, its moral influence on all rational beings as individuals, and on whole communities, states and nations. Let all good citizens unite with us in fostering the professional education of young men who are to follow the plow, and the general diffusion of useful knowledge that must certainly result from this course, will be invaluable to the country.

This effort to scatter scientific information broadcast over the whole Union, is free from the taint of any political, any sectional, or private objects. Every where one sees in his travels, valuable fertilizers wasted; wet fields that require draining; old fences that need repairing; briars and bushes which ought to be eradicated; and impoverished soils which may be economically renovated. But the great work of improvement is fairly under way. Scores of agricultural journals, and thousands of good men and true are devoted to the task of changing for the better the whole scope of American husbandry.

AGRICULTURE.—It is an innocent pursuit that can do injury to no one. It invades no man's just rights, and predjudices no man's safety, health, peace, or reasonable enjoyment. It is a beneficial employment, for whoever cultivates the earth, and covers it with rich and golden crops, renders it more beautiful; and whoever causes the earth to yield its fruits, increases the means of human comfort and subsistence.

The only way to be permanently safe is to be habitually honest.

COMPOSITION OF BONES AND GUANO.

BONES differ slightly in composition in different animals. The bones of the same animal vary in their relative proportions of earthy elements at different ages. Young animals have more gelatine and less phosphate of lime in their bones than old ones. The following composition of the bones of a cow, will give the farmer a fair idea of the constituents of this substance as they commonly exist when applied to crops as a fertillizer:

Organised combustible matter [gelatine]	33⅓
Phosphate of lime	55½
Phosphate of magnesia	3
Carbon of lime	3⅓
Soda and common salt	3½
Chloride of Calcium	1
	100,0

One hundred pounds of Gelatine consists of,

Carbon	50,37
Hydrogen	6,33
Nitrogen	17,92
Oxygen	25,35
	100

As one-third of the weight of bones is gelatine, and 100 parts of gelatine contains 18 of nitrogen (less a small fraction,) it will be seen that 6 per cent of dry bones consists of organized nitrogen, an important ingredient in wheat, and the seeds of other plants.

As applied to land, bones contain about 18 per cent of water; Ichaboe guano from 20 to 25 per cent.—It is an important fact, that bones contain more than twice as much *phosphate* as guano. The composition of Ichaboe guano is thus stated by Prof. Johnston in a late Journal of the Highland Agricultural Society, as the average of several hundred analyses:

Organic animal matter	56
Phosphate of lime and magnesia	26
Salts of soda	6
Salts of potash	trace.
Silicious matter	2
	100

By referring to the analysis of bone it will be seen that there are 55½ lbs. phosphate of lime and magnesia in 100 of bone.

Many interesting experiments have lately been tried in Scotland with bone dissolved in sulphuric acid, (oil of vitriol.)

It has been found that four, and in some cases two bushels, dissolved in acid, produced as good crops of turneps as sixteen or twenty bushels applied in the old way of grinding and using the dust.

Sulphuric acid is itself a valuable fertilizer alone; while it renders both the *gelatine* and *phosphates* in bones available *at once* to all plants, when placed near their roots. Prof. Johnston recommends the use of half as many pounds of acid undiluted as there are of bones, in which the latter are to be digested. The process in few words may be described as follows:

Break the bones into small fragments with an axe or hammer and throw 60 or 100 lbs. into a water-tight barrel set partly into the ground in a back yard or garden. Add half as many lbs. of boiling water as bones, and a like quantity of strong sulphuric acid. Stir constantly the mass with a stick. A violent effervescence will take place by the escape of carbonic acid.

ORGANIC ACIDS—PARASITE PLANTS—MINERALS, &c.

BOUSSINGAULT found that young plants of trefoil watered with solutions of *oxalate* of ammonia diluted to 600 times its weight, died in the course of eight or ten days; although other plants similarly situated watered with distilled water did well, and blossomed. As ammonia is known to be highly useful when pure, or in a carbonate, if properly diluted, the bad effect of the oxalate was attributed to the oxalic, or *organic* acid.

Question. Do not parasite plants that grow on the trunks of trees draw their nourishment from juices or sap which was partly elaborated in the organs of the parent, or suffering plant?

Answer. This is a disputed point. Cryptogamous plants grow on old rails, the roofs of houses, and granite boulders as well as on living trees. Any *nidus*, or root-hold that will yield the little mineral salts which the plants require, whether extracted from stone or wood, seem to answer for those that need little beside air and water for their full developement.

Q. Why do you call air and water *minerals*, or mineral elements?

A. Because water and gases or air, form a large portion of the mineral or earthy crust of the globe. *Oxygen gas*, which forms 8 parts in 9 of pure water, weighs more in granite rock, and in both clayey and sandy soils, than any other simple element or mineral. Water also exists as one of the constant elements of the hardest and most durable crystals.

Q. I had thought that oxygen or vital air in the atmosphere, was as different from stone, or granite rocks as one thing can be unlike another. Explain how it happens that the air we breath and granite are to a large extent composed of the same simple element?

A. In 100 lbs. of the atmosphere there are 21 lbs. of oxygen. If 48 grains of a metalic base called *silicon* be burnt in 52 grains of this gas (oxygen) there will be formed 100 grains of a mineral called *silica* which is pure flint sand, such as is used for making glass. More than half the weight of granite is silica which has *acid* properties and is called by chemists "silicic acid." When crystallised, the mineral is usually called *quartz*. This silicic acid combines chemically with *alumina*—the basis of clay—and with magnesia, potash, soda, and lime, to form *felspar* and *mica*, the other minerals in granite, beside *quartz*.

Q. You say that oxygen forms 52 in every 100 parts of pure sand. In 100 lbs. of pure *alumina* is there any of this vital gas; and if any, how much?

A. In 100 lbs. of pure alumina there are, according to Prof. Kane,

Aluminum	53.3
Oxygen	46.7
	100.0

Q. Is pure pipe clay, or porcelain clay pure alumina; or is it some compound with other minerals?

A. The very purest clay in existence, such as is used for making China-ware, is properly speaking, a *salt*, or a compound formed by the union of about 60 parts of silicic acid (silicia) with 40 parts of alumina. Prof. Johnston thus states the composition of this mineral having water in its composition:

Silica	46.92
Alumina	34.81
Water	18.27
	100.00

In the above compound which forms pure clay, the amount of oxygen contained in the mineral is greater than the three other elements, silicon, aluminum and hydrogen put together.

Thus, in the silica there is 52 per cent.	55 parts.
In the alumina 46.7 per cent.	16 "
In the water 8-9 of the whole	16 "
	87

I have omitted fractions. The hydrogen is united with oxygen in the proportion of 1 lb. in 9 to form water.—*From Lee's Study of Soils.*

"JUMPING AT CONCLUSIONS"—AGAIN.

BY A YOUNG DIGGER.

MESSRS. EDITORS:—In the December number of the Farmer I made a few remarks on "Jumping at Conclusions," to which Mr. J. H. WATTS replied in what I considered a very bad spirit.

Mr. W. accuses me of "*attacking numerous correspondents*," (although I made no allusion whatever to any correspondent but himself,) which he appears to think very presumptious for a "*youngster*." I think I "*attacked*" no one, but merely gave a few hints regarding the too hasty adoption of opinions and theories founded only on single experiments, and without due regard to other influences that might have caused, or at least have affected the result. In this I am happy to be supported by the wisest and best—by both scientific and practical men, who have seen and lamented the evil. Mr. GARBUTT, in the last number of the Farmer remarks that "*one or two experiments*, APPARENTLY *favoring a theory, should not be taken even as a* PROBABILITY *of its correctness.*" But Mr. WATTS founds his theory on a single experiment. Of course he was not of the opinion that digging around and manuring his pear tree would have had a tendency to injure it, or he would not thus have treated it. Mr. W. started in the spring with the idea that good culture was necessary to a healthy tree and fine fruit, and like a sensible cultivator removed the grass from his tree and gave it a dressing of manure. But, from some cause or other the tree *died* of fire-blight, and without waiting to repeat the experiment on other trees, in different seasons, and under different circumstances, Mr. WATTS jumped at the conclusion that his tree died of a *surfeit*, and the only preventive was to give trees *hard fare* and *short allowance*. He not only founded his theory on a single experiment, and one contradicted by the experience of nine out of ten (if not the tenth,) but publishes his baseless theory to the world as an important discovery, and is highly offended that a "*young digger*" should presume to question its correctness. How much confidence can there be placed in a theory thus rashly adopted, or in the opinions of a man so hasty in his couclusion?

Mr. W. says: "It is no small satisfaction to me that Mr. BARRY was willing to notice my article." And it is no small satisfaction to me that Mr. B's opinion of Mr. WATTS' theory and my own, are somewhat similar—that it is one of those hasty theories, not very injurious, because not likely to be adopted by men of thought.

I am called upon for a preventive of the blight.—The matter has been discussed by the best Horticultural writers in the country for the last few years, and various causes assigned, such as "*frozen sap*"—"*insects*"—"*effect of sun*," &c., each theory having its advocates. While such men as HOVEY, DOWNING, BARRY, &c., disagree, as to the cause, I think

the ignorance of a young digger, on this point, excusable.

Mr. WATTS appears to derive peculiar pleasure in calling me a "*youngster*." I hope my follies will cease with my youth, and wisdom increase with my years, that in my *old age* I may not propagate baseless and visionary theories unworthy even the young and inexperienced. But, I have learned even in my youth not to form opinions hastily and without due reflection, and especially not to publish illy matured theories to the world. This Mr. WATTS has yet to learn. I have learned also, that when my opinions are published, they are common property, and to bear with good nature all comments, whether favorable or otherwise: this Mr. WATTS has to learn in his *old age*.

Mr. WATTS concludes by saying that he will "*leave me with the potato rot*." I am willing to be left in the contemplation of this terrible disease, its cause and its consequences to the human family; but I am sorry to leave Mr. WATTS cultivating *weeds* and *grass*, in the vain hope of raising pears, forgetting that "what a man soweth, that shall he also reap."

AGRICULTURAL EDUCATION.

AT no period in the history of our country has Agricultural Education absorbed so large a share of attention as at the present time; the press throughout its entire extent teeming with articles in reference to it. This bespeaks the approach of a more enlightened epoch to the Agriculturist; and when the institutions anticipated shall be established, we may confidently expect, that the community of Farmers will be elevated to that exalted position, to which they are entitled by the nobleness of their vocation.

That Agricultural Colleges will be founded at no distant day, cannot be reasonably doubted — many circumstances inducing the belief. It is highly probable that the subject will be taken into consideration during the next session of Congress, but no efficient aid need be anticipated from that quarter. The objection that will be urged by the members of Congress, to an appropriation of Government funds for Agricultural Education, will be the great dearth in the Public Treasury, occasioned by the effectual drainage resulting from a protracted session, exorbitant mileage, foreign war, &c., &c. Thus, while they are liberally helping themselves, and annually expending large amounts in superfluous military preparations, and in sustaining an expensive institution for giving instruction in the horrid art of human butchery; the great interests of Agriculture are neglected, upon the condition of which depends that of the nation. Farmers should look into these matters, and when the promotion of their purposes is prevented by the cry of government poverty, they should inquire into the cause of that poverty.

Certainly no course of Legislation can be more judicious, than that which insures prosperity to that class of citizens that forms the reliable support of our boasted institutions. Republican France seems to be conscious of this fact, and in the organization of her twenty Agricultural Schools, she is adopting the most effectual means to nourish and sustain the divine plant of liberty.

Though we do not look with any hope to the Congressional decisions relative to this matter, still an agitation of the subject may be productive of some good. The brightest signs of the times are seen in the Empire State, and her Chief Magistrate has won a laurel, that will cause his name ever to be embalmed in the annals of Agriculture. The honor is ascribed to him, of being the first individual in the Union, who gave an official recommendation for the establishment of an Agricultural College, and that recommendation is meeting with a hearty response; and we are sanguine in the belief that New-York will lead the van in this important system of Education.

The means for obtaining that practical knowledge requisite for the Farmer, is at present very limited, the common College education, requiring four years of classical study, being wholly inapplicable to his wants. Therefore, institutions of a different nature must be organized; and why the Public Treasury, that has ever been accessible to the educational wants of the few, should be sealed against the necessities of the many, is a matter of no small moment. But while we would censure Legislators, we would not permit the Farmers to escape unnoticed, who if anything, have been more in fault, for not demanding their rights — which, instead of doing, they have denied the very existence of, by condemning Agricultural Education. But thanks, that "a change has come over the spirit of their dream," and that that semi-civilized notion, long cherished, is fast becoming obsolete. And we express it as our firm conviction, that the time will arrive when an illiterate tiller of the soil will be numbered among the things that were.

What a mistaken idea, that ignorance and Agriculture are fit companions! As reasonably might we assert that the rising of the sun would rivet the clouds of darkness to the earth. There is no vocation to which science more effectually lends its aid, and no one should be more intimately acquainted with the laws of nature, than he whose daily employment brings him into communion with her. The Farmer, then, should become thoroughly educated, that he may understand the delicate operations of vegetable and animal life, so as to be able to render that timely and efficient assistance that will insure a perfect development of every part, and that he may be qualified to enjoy the beauties by which he is surrounded. For the enlightened mind is at home in the field, and every object that meets the sight awakens a train of thought of transcendent sublimity. Whether the minute insect, the delicate blade of grass or the expanded wild flower blushing in the simplicity of unaffected nature, attracts his notice, he perceives on each the impress of Deity, blending together most beautifully the functions of every part, for the consummation of the object to be attained.

Then, in view of the two-fold desirable result produced by an Agricultural Education, and the admitted point, that the advance and elevation of this noble art is dependent upon such education, it becomes the duty of all Agricultural Journals to lend their powerful influence towards strengthening the feeling now striving for the ascendancy. *Germantown, Pa.*, 1849.

WOOD-HOUSES.—There is no convenience attached to a farm establishment of more importance than the wood-house. It need not be an expensive structure, although both convenience and economy require that its size, and the materials of which it is formed, should be adapted to the size and circumstances of the family. As a general thing, it should be a *wood-house* and nothing lessnor more. No tools or farming implements should be housed there, for these require a separate place.

SALT AS A MANURE.

EDS. GENESEE FARMER:—I some time since received a note from the *Secretary of the State Agricultural Society*, B. P. JOHNSON, requesting my experience in the use of salt. With your permission, Messrs. Editors, I will reply through the columns of your valuable and widely circulated paper, and thus give the farmers of the whole country the benefit of my experience. The following is the note of the Secretary:

STATE AG. ROOMS, Albany, Aug. 2, 1849.

Mr. John Park — Dear Sir:— I saw a notice in a Rochester paper of your success in applying salt to your wheat. Will you oblige me by informing me what is the difference in the crop prepared with salt and that which was treated in the ordinary way — both as to the yield per acre, and the quality of the grain. Respectfully yours,

B. P. JOHNSON, *Sec'y State Ag. Society.*

Agriculture is, no doubt, the first and oldest art; for we read that Adam's eldest son was a tiller of the ground; and yet, through the lapse of centuries, how slow has been its improvement. It was not until the last half century that it received any material impulse by way of advancement. It is not enough for a man to be a practical farmer; he should understand something of astronomy and geology, and a knowledge of chemistry is most essential.

Perhaps in Great Britain farming is better understood than in any other part of Europe; and yet there it is only in its infancy. I know of no nation more worthy to be imitated, in many practical points of rural economy; but, as the climate of the United States is so different, the same mode of farming will not answer both. Great Britain being an island, (and no part of it is 100 miles from the sea,) let the wind blow from what point it will, it is a sea breeze, subject to sea fogs, and a continual moist atmosphere, which is very fertilizing. Cattle in England need no salt as in this country, and salt might not benefit the land, but salt judiciously used here is a most valuable mineral manure. I have been trying it several years, and it answers my most sanguine expectations.

Salt as a manure has several advantages over barn-yard manure — for the latter does not always get sufficiently rotten to kill noxious weeds — and we often get a better crop of red root, Canada thistles, &c., than is desirable. Second, the expense of manuring with salt is not a fifth that of barn-yard manure, which I calculate as follows:

24 loads barn-yard manure, say	$0,00	
2 men, putting on ground, 2 days each, at 6s..	3,00	
1 span horses and 2 wagons, 2 days	3,00	=6,00
1 barrel salt per acre	1,00	
Expense of sowing		6=1,06
		$4,94

In this hot, dry climate the ground is full of innumerable quantities of visible and invisible insects, some of which destroy the seed. These insects must live on something, and some, no doubt, subsist on the nutritious properties of the soil, and the manure laid thereon, as it is well known that rich land and gardens mostly abound with worms. Salt will kill most of these, which of course puts a stop to their living on the fat of the soil, and their small dead carcasses will add something towards enriching the land, which with the fertilizing properties of the salt makes it in good condition to receive the seed. On fallow, or before seeding, I consider salt of the greatest advantage. A small quantity, say one bushel per acre, on wheat or meadow, sown in the spring, before it begins to vegetate, will greatly strengthen both.

I now proceed to give an account of my experiments. The first was on a small patch of corn about a foot nigh. I took a little salt in my finger and thumb and dropped on each hill; before many hours the leaves began to flag, and in two or three days they were all dead. I thought I had lost my crop and took no farther notice. About too weeks after I was surprised to see my corn up again, nearly as high as before. It was evident there was not a sufficient quantity to kill the seed. I also threw a small quantity on a white thorn fence. It killed the leaves, having the appearance of a blast. They came no more out that season.

I was not discouraged at my adventure, but knowing the effect of salt on the animal kingdom, and its near approximation to the vegetable, I determined to "try again." Having a seven acre field that had received no manure for four years, and then only a small quantity, I plowed it up the latter part of the 9th month, 1847, for the next summer fallow. In the 5th month following, 1847, I plowed it again after which I sowed seven barrels of salt, being a barrel per acre, in two of which I mixed two pounds of arsenic and sowed it in the middle of the field. I could not perceive any advantage where the arsenic was used, over the other part; all appeared alike. My object in using it was to make sure work in destroying the insects. About two weeks after I dragged it both ways, and the beginning of the 7th month plowed it again — kept the drag at work — and about the middle of the 8th month I plowed it the fourth and last time, (including the last fall's plowing.) On the 1st and 2d of the 9th month I sowed it with Soule Wheat, two bushels per acre. It was a fine growing time; it came up luxuriantly. Most of the blades were half an inch broad, and it would have jointed had I not eaten it off with four horses and two cows for three weeks, after which I spread their dung.

This was a novel mode of farming, and great interest was manifested in the neighborhood to see the result. Last winter was very unfavorable for wheat — severe frosts and rains with little snow; but it had good root-hold, and was well covered, which prevented its being thrown out. The past spring was backward, yet it looked well the early part of the 5th month. None was to be seen in the neighborhood to equal it. I commenced cutting it on the 11th of the 7th month. The heads were of a good size, and the yield close upon *forty* bushels per acre. The straw attracted particular notice, so beautifully bright and white; whether from the effects of the salt or not, I cannot say.

The next experiment was as follows: In one corner of an eight acre field was a complete swamp, of about an acre. Four years ago I commenced plowing it up, and although I selected a dry time, the horses sunk in up to their knees. My neighbors thought it was labor lost. I dug an open ditch at the low side and made very narrow channels, ridged and rounded them well up, and furrowed as deep as the ditch would allow. I tried turneps for the first crop, but from the insects and the hot dry weather they came to naught. Next year I tried potatoes, but with no better success — it was too wet. I tried potatoes again, and managed to raise a few. Next

year I sowed it with barley, and had a fair crop. I found this swamp improving every year. Last year I plowed and summer fallowed the remainder of the field, where had been meadow for several years. In the fall ('48) I sowed both the fallow and the swampy piece with wheat. It was a fine growing time and all came up well. The swampy part having been cropped so often, did not look as thrifty as the fallow. I got a very fair crop — not less than twenty bushels from the swampy acre. Having had a very good crop from the whole field, I concluded to put it all in wheat again. Preparatory to this I plowed it *once* and on the swampy acre I sowed about two bushels of salt — none on the fallow. All looks at this time very well, but the swampy piece looks stouter than the other part — another evidence of the beneficial effects of salt as a manure.

The following anecdotes will further show the utility of salt in killing worms, grubs, &c. A person at York, England, having in one part of his garden very rich ground of about 11 square yards, on which he could never raise any thing — it was sure to be destroyed by worms and snails. By way of experiment he sowed about three quarts of salt, and plowed it in, after which there was no further difficulty; it produced satisfactorily and luxuriantly.

My wife, who is partial to a flower garden, says when she wished to preserve any particular flower from snails, (which abound in English gardens,) she would enrich it with salt. The snails would come to the margin of the salt and turn away, which she discovered by the slimy path they make.

Further, if you put a few grains of salt on a leech that has been extracting blood, it will instantly vomit it out; a great many die, and those that survive linger along, and never appear to regain their health; while those that have the blood squeezed out of them with the finger and thumb, soon (with care) become healthy and fit for use again. JOHN PARK. *Gates, Monroe Co., N. Y.*, 1849.

A BIT OF PRACTICAL FARMING.

P. T. BARNUM, of Museum notoriety, has a country seat at Bridgeport, Conn. He has given some attention to farming and gardening, of late, and was elected President of the Fairfield Co. Agricultural Society. We give his experience in farming in his own words:

Selling Potatoes.— "In the fall of 1848," said he, "my head gardener reported that I had 80 bushels of potatoes to spare. So, of course, I directed them sold. They brought 67 cents a bushel. But, like most all small farmers, he sold the largest, and left us nothing but 'small potatoes' to eat at home. But the worst is to come. In March, we had not even a dish of *small* potatoes. So we bought more than we sold, and paid $1,25 a bushel at that! My experience, therefore, is, that a farmer had better ascertain first how much he wants for his own consumption, before he sends his produce to a cheap market."

Trimming Fruit Trees by an Amateur.—Another of Mr. Barnum's experiments was in the horticultural line, and was related by him with such inimical good humor, that his large audience was nearly convulsed with laughter. "Having been elected President of the Fairfield County Agricultural Society," continued he, "I felt the importance of my having a little *practical* experience as a farmer. Having reed a little about pruning, and watched my gardener awhile, I armed myself with a keen carving knife and set to work on my own hook. My first essay was upon a lot of young cherry trees. Half an hour, and my sharp knife gave them quite a symmetrical appearance, and removed all redundant limbs and sap-absorbing sprouts and suckers; and I prided myself somewhat upon this first effort as a pruner, and, of course, expected suitable commendation from my gardener for the labor I had saved him. Judge my astonishment, then, as he approached with a rueful countenance, and expression of 'Well, sir, you've done it now!' 'Why, yes, I fancy I have. How do you like my work?' said I. 'Like it! *Why, sir, you have cut off all the grafts!!*' This was a sad blow to my farming aspirations. But as I never despair, I shall continue to go ahead with improvements, but shall be a little cautious how I use the pruning knife, until I learn to know a sprout from a graft.

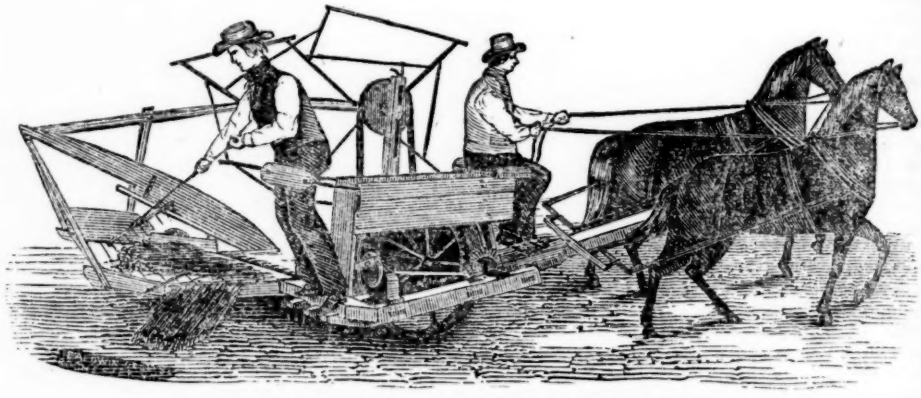
"I hope the relation of my *experience as a farmer* won't deter many others from seeking the same employment; for if they are capable of using the pruning knife at all, I think they are capable of learning to distinguish, perhaps, at less cost than I did, the useful from the useless, and if they did not, perhaps a little sprouting, *a la mode* our young days, might help to improve their education."

HUMAN PROGRESS.—Every individual, community and nation, must be interested in the moral, political and physical progress of humanity. It is a stock concern, in which we all have some share. We have not, however, the slightest intention of giving our readers on this Thanksgiving morning a moral essay on the law of human progress; but by way of adding a fact, not perhaps generally known, for which the lovers of long life and the blessings thereof may be thankful, we extract from an oration delivered by Cha's. Sumner, Esq., of Boston, before the Phi Beta Kappa Society of Union College, some time since, the following table, showing the diminution of mortality in several countries of Europe and in the largest cities thereof:

Deaths in England	in 1690, 1 in 33	in 1848, 1 in 47
" France	in 1775, 1 in 25½	in 1848, 1 in 42
" Germany	in 1788, 1 in 32	in 1848, 1 in 40
" Sweden	in 1760, 1 in 34	in 1848, 1 in 41
" Roman States	in 1767, 1 in 21½	in 1829, 1 in 28
" London	in 1690, 1 in 24	in 1844, 1 in 44
" Paris	in 1650, 1 in 25	in 1829, 1 in 32
" Berlin	in 1755, 1 in 28	in 1824, 1 in 34
" Vienna	in 1650, 1 in 20	in 1829, 1 in 26
" Rome	in 1770, 1 in 21	in 1828, 1 in 31
" Geneva	in 1560, 1 in 18	in 1821, 1 in 40

Although we have no statistics like the above in relation to our own country, it is to be inferred that we should compare favorably with any European nation, as we have not been behind any, but have rather led them, in all that tends to the advancement and progress of a great people — in all that elevates and ennobles humanity, and as a necessary consequence tends to lengthen out the period of man's brief sojourn here. A little more attention to the laws of health — laws written in the constitution of every man — will accomplish much in the physical department of human progress. Two-thirds of the sickness which afflicts mankind, in a thousand different forms, might be warded off by proper attention to vigorous and systematic exercise, more plain and simple diet, regular hours of recreation and sleep.—*Arg.*

We are glad to see so influential a paper as the Albany Argus calling public attention to the fact that, "two-thirds of the sickness which afflicts mankind" may be prevented. The importance of this truth can hardly be over-estimated. Evil habits, such as the excessive use of tobacco and other poisonous substances, fashions in matters of dress, wet feet, and exposure to miasmatic climates, bring thousands and millions of our race to premature graves. The time approaches when the laws of health will be both studied and obeyed as they deserve.



SEYMOUR & MORGAN'S IMPROVED REAPING MACHINE

As our country improves and our population becomes more dense—as our forests disappear before the woodman's axe and the boundless prairies become covered with the golden grain—as our home consumption increases and the nations of Europe look to us for bread, REAPING MACHINES will become absolutely necessary to secure our crops, especially in the Great West. Hundreds of acres every season in that section, are either materially injured or entirely lost for want of the proper facilities for harvesting. A machine that can do this work well will be of the greatest public benefit, as it will not only enable the farmer to secure his grain, at just the right time, and also be a great saving of expense, but it will also enable him to do by horses, oxen, or even steam, that which has hitherto been done by a most severe description of manual labor, rendered doubly oppressive by the season of the year in which it must necessarily be performed.

Reaping Machines have been used in England, to some extent, since the commencement of the present century. The mildness and moisture of the climate, however, making the ripening process slow, and the harvest comparatively lengthy, and the cheapness of labor, obviates, to some extent, the necessity which exists in this country. In 1821 a Reaping Machine was invented by JEREMIAH BAILEY, of Chester County. We believe this machine answered the purpose tolerably well, and was used to some extent. A machine was invented and built in this city some ten or twelve years ago, by a Mr. MOORE, that was designed to cut the grain and thresh it in the field. These machines have been improved, and are now manufactured and used at the West. The Reaping Machines most generally used of late years, is *McCormick's Virginia Reaper*, and *Hussey's Reaper*, both of which have been figured and described in previous volumes of this paper. Messrs. SEYMOUR & MORGAN, however, think their machine an improvement, and superior to either. We have not had an opportunity to witness it in operation, but those who have seen it work, pronounce it superior to any other in use; cutting from fifteen to twenty-five acres a day in the most perfect manner, even among wet and lodged wheat, never choking, though the grass be ever so abundant, and that it leaves the grain in a good condition for binding. We shall make it our business to see this machine at work, and shall then speak definitely of its merits; in the meantime we refer all interested to the advertisement of Messrs. SEYMOUR & MORGAN, and the certificates accompanying, in the present number.

CARE OF STOCK.

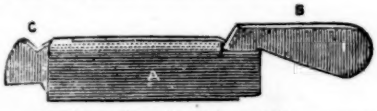
EDITORS OF THE FARMER:—IN addition to warm stables or sheds for cattle, such as are tied at all, should be fastened securely by the neck or head.—Many a one has lost a valuable cow by injuries received by loose stears, oxen or other cows attacking them in a savage manner, when there was no possibility of escape. Horses too are frequently injured by kicks by getting loose in stables; or by standing too closely together.

Great care should be taken in fitting up stables to have the floor sound and strong; the manger and stantions in the right places; and the animals kept clean and dry by some proper bedding and the frequent removal of all droppings. Warm stables, well ventilated and cut feed will enable one to winter stock with the least expense, and in a thriving condition. Not only should their food be given to them regularly and in due quantity, but their water and salt should be offered with equal uniformity as to times and seasons. System and order are indispensable to the stock grower and dairyman. The best way to salt cattle in winter is to feed them brined straw corn fodder or hay twice a week. In this way a little salt can be kept constantly in the systems of domestic animals and greatly promote their health and improvement. Avoid driving or sending stock a great distance to water in winter. They are apt to suffer much from thirst; and to drink to excess when they do reach the spring, well or creek.

Green feed such as turneps, carrots, pumpkins, potatoes and the like, is extremely useful to mix with the dry forage of the farm in winter. There is room for great improvement in wintering and fattening sheep, swine and neat cattle. Much may be gained by providing suitable food the season previous, and having it well protected from frost. In addition to this, warm pens and comfortable stables are indispensable to economy in saving living flesh from waste, and making new on the carcasses of domestic animals. ONTARIO.

ARNOLD'S PATENT SASH LOCK.

"Sands make the mountain"—our lives are made up of trifles. Those matters which afflict us the most sorely, and give us the greatest inconvenience and trouble in passing through the world are generally but trifles. The flood may come and destroy the farmer's crops; but it is gone, and he repairs the injury—its effects upon both temper and fortune are soon forgotten. The dripping of the rain through a decayed or broken shingle, (which half an hour's labor might remedy,) causes more annoyance, more damage to the house and the temper of its inmates than the flood. A man may lose half his fortune, and bear it like a philosopher,—but what has philosophy to do with hammering one's fingers or breaking a light or two of glass in attempting to make a rusty nail support or fasten a window sash, or in having a favorite book spoiled in the same work.



The engraving given in this article represents a *Window Fastener*, invented by Wm. E. Arnold, of this city, which either fastens the window down, or secures it in any position. We take the following from the New-York Scientific American: "Of all the various kinds of fasteners now in use, some of which are exceedingly ingenious, we know of none which recommends itself more thoroughly by its simplicity than this. The Lock consists simply of a bolt of iron or brass B & C with a sheet iron box A, the latter being morticed into the sash, leaving but a small part of the bolt B, perhaps three-fourths of an inch, projecting, by which it is moved. About this lock or fastener, there is no complicated machinery, no spring or screws, and a bolt being moved by its weight, forms a complete lock for the window. When once in the window they will last until the material of which it is composed wears out. The great fault with many other fasteners, is their liability to get out of order. Not so with the one represented above, for the simple reason that there is no machinery to require fixing or springs to be renewed. Those who know any thing of the perplexity of a bad fastener, will appreciate any invention which promises an improvement."

The Lock is designed to be put square through the left hand style of the upper and lower sash, about half way of its thickness, leaving the handles of the bolt a little more than the eighth of an inch from the inside of the glass. To save the trouble of morticing entirely through, bore with a half-inch auger bit until the point pricks through, leaving about one-quarter of an inch to mortice, which should be of sufficient width and thickness to drive the Lock through from the inside and let the bolt work free. A suitable number of mortices should be made in the window frame to receive the end of the bolt. All but the upper ones and the lower one for the lower sash, should slant up about one and a quarter inches. The iron stops should all be driven square into the frame, except the lower one for the lower sash, which should correspond with the shape of the end of the bolt to hold it down. We think we can corroborate all that is said in the above extract in favor of this fastener. We know of hundreds in use in this city, and we believe they give in every case entire satisfaction.

Value of Annealed Wire for Fences.—In a conversation with Mr. Grant, of fanning-mill notoriety, he remarked that annealed wire never rusts. He stated that he had now a wire screen to a cellar window, which has been very much exposed, on the north side of the house, for thirteen years, and until the chestnut frame is quite rotten, while the wire, although of No. 6, and never painted, is sound and good.—He remarks the same fact in regard to wire used for fanning mill seives. We also have some experience to the same point.

In putting up some wire around a poultry yard, to prevent the fowls from flying over the pickets, (which, by the by, were only 4½ feet high, with two wires above, and answered a good purpose,) we used bright wire. This rusted off, and failed entirely in one season. We then used annealed wire, which although much finer, is still sound and good, after three years' use.

Mr. Grant's opinion, corroborated by our own experience, is that annealed wire exposed to the atmosphere does not rust, at least not enough to destroy it, and that it is a better preventive than galvanizing, or any other process.

This important fact should be borne in mind by all who are intending to build wire fence.—*American Agriculturist.*

If wire can easily be preserved for an indefinite and very long time from all damage by rust, by simply annealing, it will soon come into general use as a fencing material. With read cedar, locust or stone posts, a fence might be made at once straight, beautiful, lasting and economical. In many sections, both rails and boards are scarce and high, and stone for walls not to be had. In such places, wire, perhaps with the aid of a ditch and bank of earth, may be resorted to with advantage. If one desires to combine ornament with utility, he can plant a row of trees 100 feet apart along the line where the fence is needed, attach the wire to them; having a few firm stakes between the trees to give strength to the fence, or the trees may stand nearer to each other. In most parts cedar grow well, and a few of their ever-green cone tops, interspersed with deciduous trees, will add much to the beauty of a fine farm. Even fruit trees might serve as supports to wires if desired.

Extraordinary Invention.—A Mr. Appold has invented a remarkable machine, called the "Centrifugal Pump," for draining marshes, &c., and a most ingenious affair it is.—You have heard of the turbine—a small box water-wheel, possessing extraordinary capabilities for work. Well, Mr. Appold's model contains shch a wheel made of tin, a little thicker, but no larger than a half-penny. This is fitted at the bottom of a square tube dipping into a small cistern containing water, which may represent a lake, &c. The little wheel, being made to rotate with great velocity, throwing up water rapidly into the tubes above itself, until it overflows in a continuous stream at the top, and the volume of the stream is such as to deliver eight gallons per minute; and, on aplying a nozzle, the stream is driven to a distance of twenty feet. This, you will say, is a marvelous effect from so apparenetly insignificant a cause, but a wheel, about fifteen inches in diameter, exhibited at the same time, will delive 1,800 gallons per minute; it requires to be worked by an engine of four horse power. Mr. Appold has lately proposed to the Dutch Government to fix a similar wheel on the Haarlem Sea, now in progress of being drained by forty pumps, driven by steam.

A centrifugal pump of forty feet in diameter would do more work than all the others put together, and would deliver—so the inventer asserts—1,500,000 gallons per minute. With such power at command, one would think we ought never more to hear of ships foundering at sea; and the emptying and reclaiming of the Zuyder Zee resolves itself into a possibility.—*Foreign Journal.*

The above "extraordinary invention" is not so extraordinary as the writer supposes. If we had Commissioner Eubank's able work on Hydraulics at hand it would probably inform us about the time when the kind of wheel spoken of was invented and first used. We have seen them in use in Georgia and elsewhere with success, and did not regard them as showing any new principle or fact.

CULTIVATION OF THE SWEET POTATO IN N. Y.

THE following remarks on the Cultivation of the Sweet Potato, is given in a letter from S. S. RIDDER, of Maria Forge, Alabama, to B. P. JOHNSON, Secretary of the New York State Ag. Society, and published in the Transactions for 1848:

"I have been asked by some of the members of your Society, my opinion about the practicability of cultivating the sweet potato in this State, and the best mode of cultivating them. I have no doubt of your being able to raise sweet potatoes in this climate if properly managed, as I have known them grow to a very large size in Alabama in three months; and you have three months of quite as warm weather here, generally, as we have in Alabama, (viz.,) June, July, and August. I will give you a brief statement of my experience in cultivating the sweet potato. When I went to Alabama, six years ago, I knew nothing about the method that it was best to pursue, and had to depend on the experience and instruction of my neighbors. I pursued their plan until I found a better. The best mode that I have found is the following: First prepare a bed for laying down your seed potatoes to produce slips for planting, by digging up a bed, say three feet wide and ten feet in length, longer or shorter, according to the quantity of potatoes you have; throw the earth out of this bed to the depth of one foot, and fill in manure from the horse stable sufficient to make a good hot bed. It should be raised some ten or twelve inches above the surface of the ground, and the top of the bed should be sand and loam. Place your potatoes in rows about six inches apart across the bed, and cover them to the depth of two or three inches; the manure should be kept moist to create heat, to foward the growth of the slips as fast as possible. As soon as the slips are five or six inches high they are ready for planting.

Your ground for planting should be a light soil of sand and loam, where it can be had, but good clay will produce very good potatoes sometimes. The ground should be plowed very deep, and thrown up in ridges or hills, such as Irish potato hills after they have been hoed. The ground should be ridged or hilled immediately before planting, so as to be moist, as this is a very important matter to the growth of the slips when first planted. It is best to choose a time for planting when there is a little rain and cloudy weather, but they may be planted in dry weather if they are watered for two or three evenings, and do well. When you draw slips from the bed you should place your hand over the potato, to keep it from coming out of the ground, and take hold of the slips with the other, catching them as close to the potato as possible, and pull them off. You can pull all that have full sized leaves, and in eight or ten days your bed will yield another crop. Plant one slip in a place: if in ridges put them about eight inches apart.—When you get done planting throw the earth from each side of the ridge with a plow or hoe, that the sun may warm the middle of the ridge. As soon as your vines get fully rooted and are ready to commence running, throw the earth back, and after the vines begin to spread, hoe out all the weeds, and draw the earth up well around the vines, but be careful that there is no earth allowed to go on them, as they will take root wherever they are covered, and produce a bunch of small, stringy potatoes. I was told to cover a part of the vines, and after following the direction and the custom of the country one or two years, I abandoned it, and I soon found that I had a much better crop. Although I had not as many in number as when I had the vines loaded with little stringy potatoes, my potatoes in the hill were all large and fine, and the aggregate crop much larger."

ARSENIC FOR THE WIRE-WORM.

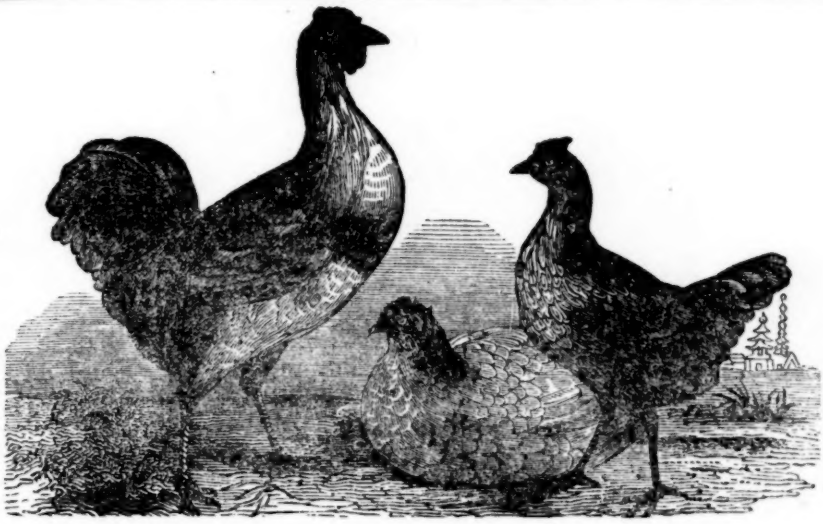
MESSRS. EDITORS:—Arsenic, although a very dangerous article, I am inclined to believe, might be used in destroying the wire-worm, which is destructive to wheat. In reading an English paper, I observed a statement that certain game-keepers found numbers of pheasants and patridges dead, and to ascertain the cause, their stomachs were analyzed and found to contain arsenic. This they had procured from the seed wheat they had picked out of the land, which had been soaked in arsenic and water. Would not such a hint be useful to our farmers when they plant corn? I should strongly recommend it, and after planting is finished, sow broad-cast a peck. This would save the crows the trouble of scratching it up, which no farmer would object to.

Should any one be induced to mix arsenic with salt, which I believe would completely clear the land of wire-worms, grubs, and all other insects, the man who sows it should do so with gloves on, as he might suffer if he did not take this precaution. The finger-nails show the effects first. If it is mixed on the barn floor, it should be washed clean, for if horses or cattle should lick the floor it might prove fatal.—The gloves and all connected with this mixture it would be safest to bura. JOHN PARK.—*Gates, 12th month*, 1849.

REMARKS.—Arsenic on land would undoubtedly prove destructive to both birds and insects. But we fear frightful accidents from carelessness would follow its general use. We are not surprised that English farmers should use arsenic, and we opine they feel no regret at the death of the patridges and pheasants. We have seen large fields of wheat two-thirds destroyed by the game. They are the curse of the farmers in many parts.

GUANO.— Does guano afford a permanent improvement to the soil, or does it act on the first crop, and then leave the land as poor, or poorer, than it was before? This is a question so often asked, we will once more answer, that this is like all other *stimulants*, whether applied to man or the soil, unless furnished with some other food, the effect will not be permanent. But give the land a small coat of marl, manure, or green crops, for the guano to work upon, and then it will be found that the effect will be not only beneficial to the first crop, but several succeeding ones. None but the genuine Peruvian guano can be depended upon. "Manufactured guano," in many cases, is nearly worthless. The Maryland Farmers, the past year, have tried various experiments in planting potatoes with guano, and find that when it is put on *top* of the hill or drill, and slightly covered with earth the yield is much greater than when placed at the *bottom* of the hill

A remarkable specimen of Indian corn is to be seen in Baltimore. The stalks are about eleven feet in height, and on the four exhibited there are 18 ears, large and well filled.



COCHIN-CHINA FOWLS.

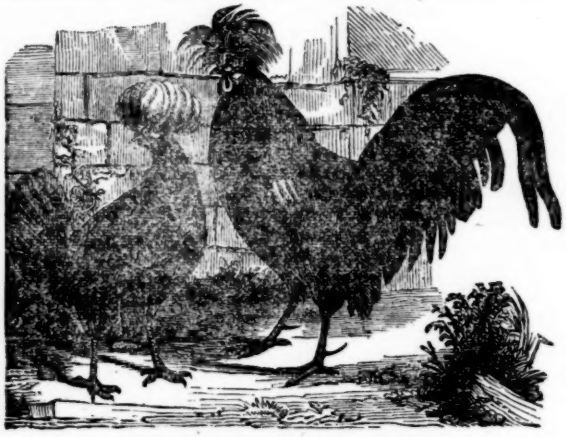
DOMESTIC FOWLS.

Few realize the importance of the Domestic Fowl. The poultry business has generally been considered too insignificant to claim the attention of the farmer, and hence this department has usually been consigned to the care of the younger members of the family. Yet no domestic animal pays a better profit on its care and keep than the dunghill fowl, when its keep and care are what they should be. The improvement of this species of birds is beginning to excite considerable interest, particularly in the vicinity of Boston, where new notions and "*Fowl Conventions*" are hatched with the shortest possible incubation. The late Convention at that place of the Fowl-Breeders of Boston and vicinity, has brought out some facts showing the importance of the business. The sales in Boston for the year 1848 was over a million of dollars. The proceeds of the sales of eggs for the same year was little short of a million of dollars. The value of poultry in the State of New York in 1840, as shown by the agricultural statistics, was *two million three hundred and seventy-three thousand and twenty-nine dollars!* which was more than the value of the swine, and nearly five times the value of its horses and mules.

The Boston papers represent this Convention as being one of the most interesting that ever assembled in Massachusetts. In the collection, which was very large, we notice the *Cochin-China*, *Poland*, *Dorkings*, *Bantams*, *Java*, and *Gold* and *Silver Pheasants*. The *Cochin-Chinas*, figured at the head of this article, were the most coveted, and prices were given for pairs of this description ranging from $9 to $18.

We copy the following description of this breed from Bement's book, taken originally from a London paper: "These extraordinary birds are of gigantic size, and in their proportions very nearly allied to the family of bustards, to which, in all probability, they are proximately related — in fact, they have alread acquired the name of 'Ostrich Fowl.' In general color they are of rich glossy brown; tail black, and in the breast a horse-shoe marking black; the comb double. Two characters appear to be peculiar to them — one, the arrangement of the feathers on the back of the cock's neck, which are *turned upwards;* and the other, the form of the wing, which is jointed to fold together, so that, on occasion, the bird may double up its posterior half and bring it forward between the anterior half and body. The eggs are of a deep mahogany color, and of a delicious flavor. These birds are very healthy, quite attached to home, and in every respect suitable to the English climate."

The *Poland Fowls* have always been favorites of ours. Their shining black color contrasted with their clean white crest give them a beautiful appearance. They lay more eggs than any other variety, and are the least inclined to set. They have not improperly been termed "*everlasting layers.*" We always found it necessary to keep other hens to hatch their eggs. The following is Bement's description:— "The Poland Fowls, as they are generally called, were, according to English authors, said to be imported from Holland. Their color is a shining black, with a white top-knot of feathers on the heads of both cock and hen. The head is flat and surmounted by a fleshy protuberance, out of which springs the crown of feathers or top-knot, white or black, with the fleshy King David's crown, consisting of four or five spikes. They are not so thickly covered with feathers as some other breeds, and still less so with down. The true breed is rather above the middling size; their form is plump and deep, and the legs of the best sorts are not too long, and most have five claws. The top-knot of upright, white feathers, covers so much of the head as almost to blind the eyes; indeed some require clipping, or they would become an easy prey to the hawks. The contrast of this perfectly white crest with the black plumage, is truly beautiful; but the top-knot of the cock differs from his hen, hers being broad and erect feathers, while his are narrow and hanging down in every di-



BLACK POLAND TOP-KNOT FOWL.

rection, but they must be perfectly white and the rest of the plumage perfectly black; broken colors, it is said by some, show a cross breed." J. H. STANLEY, of Le Roy, in this State, we understand, has a fine lot of this breed.

Dr. BENNETT, of Plymouth, Mass., remarks in the Boston Cultivator: "The eggs of some breeds are twice as valuable as those of others — for instance, one egg of the pure Cochin China Fowl, of the Baylies' importation, contains nearly as much nutritious matter as two eggs of the Black Poland or Golden Pheasant Fowl, and is, consequently, much richer, better flavored and more valuable."

That great difference exists in the nutriment of eggs, is a fact well known; but that this results less from breeds than the way in which fowls are kept, admits of hardly a doubt. As a cow cannot elaborate rich milk from a slop made of sawdust and water, so a hen is incapable of making a highly nutritious egg from clean buckwheat bran alone. The silliest of all ideas is that which assumes, that a bird can lay any quantity of good eggs without a full supply of organized nitrogen, sulpur and phosphorus in its daily food, as well as of all the other ingredients demanded by nature to form a perfect chicken in the shell. Supply abundantly, the proper material to make a genuine and healthy bird in the aliment of the parents, and rich eggs and plenty of them, may reasonably be expected. There is much point in the following remarks of Dr. Bennett: "Chickens should be fed on worms or meat-food if you desire to keep them healthy, and have them grow rapidly; and the food of fowls in general should be greatly varied, especially if they are not suffered to run at large, which, however, should always be done when practicable. The quality of the *soil* makes a great difference in the *size* of fowls. Rich ground, as it contains more worms and a greater variety of such other articles as fowls feed upon than poor land, is, consequently, much better adapted to their nature, and produce much larger fowls under similar circumstances."

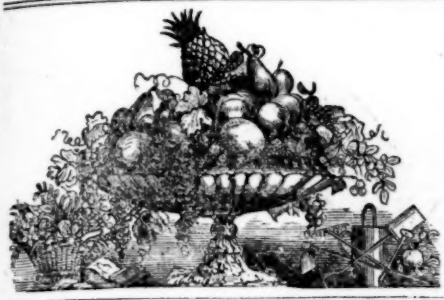
Some time since we were at breakfast at the table of a gentleman at his residence in the poor piny woods of Georgia, where lime, sulphur, phosphorus, and organized nitrogen did not abound for the production of any eggs larger than those of small yellow ants. Hen's eggs brought on the table had the thinnest possible shells, containing the poorest possible albumen and yolk. A pig which had lived four weeks and been systematically starved before killing, could not be more dejune and innocent of all fatness.

A short lecture on the domestic maunfacture of eggs and the proper keep of fowls, soon doubled the supply of this article of food in that family. All poultry about the premises now have a plenty of pounded oyster shells, sulphur-water, ash-heaps to wallow in and keep off vermin, and animal food of some kind. In addition to the latter, cooked peas and oats, or the same fed raw, are given to the birds to be transformed into the finest flesh of the duck, turkey, or chicken. Nothing is more simple and direct in its natural progress than the vegetable and animal transition by which even night soil may be converted into fat turkeys, or eggs worth from ten to fifteen cents a pound.

CANADA THISTLES.

DEAR SIR: — The Canada thistle made its appearance among us a few years since, and has increased so fast that some of us are becoming alarmed about it. Having learned that it is very common with you, a neighbor of mine, and subscriber to your paper, requests me to apply to you, through the columns of your paper, for the best mode of destroying it, or different modes if there are more than one good one. I have seen it in many different parts of the country, and am inclined to the opinion that it was introduced into our country by sheep brought from the north. Would not a large quantity of lime put on it, destroy the vitality of the plant and roots? Yours, &c., JOHN LEHMAN. — *Hempfield, Lan. Co., Pa., Nov.*, 1849.

REMARKS.—Salt is altogether better than lime to destroy Canada thistles, or any other obnoxious plants. Frequent mowing, so that no seed whatever is permitted to mature, is all important to prevent this variety of thistles from spreading. Deep and frequent plowing has proved successful in many instances. Any one who has had experience in subduing Canada thistles, will oblige us by giving an account of the process for the benefit of the public.



Horticultural Department.

EDITED BY P. BARRY.

JANUARY.

In our climate January weather seldom admits of the performance of any considerable out-door work; but those who keep an eye to the future will find many things pertaining to the garden and orchard, that can very well be done under any condition of the weather. How often do we hear people apologise for the defective management of their gardens by saying, I "had no time to attend to this or that."—Their garden crops, fruit trees, &c., in their feeble and stunted growth, show a great deficiency in their supply of nutriment; but there was no manure prepared at leisure times, and when the hurry came there was enough to do of greater necessity. Here are trees and plants blown about by the wind, going zig-zag to destruction; but there are no stakes at hand, and "there is no time to attend to it." Implements and fences are out of repair, and no time to put them in order. Now, the coldest of our winter months is just the time to think and act upon these matters. These are things that people need not be told; but we find by experience that a hint of this kind in season is of great value.

Whoever wishes to have a fruitful and flourishing garden and orchard, must attend well to the preparation of manures and composts. You might as well attempt to fatten an ox on rye straw as to grow fine fruits, flowers, or vegetables, without a regular and abundant supply of suitable manures. How many orchards are there all over the country that might be doubled, and even quadrupled in value, by a dressing of manure; and if it be prepared at leisure times, its application will be an easy matter. Our purpose, at present, is not to speak of the kind or quality of manure. We have often heard it said that "everything but stones will make manure;" and there is much truth in it. It would be difficult to tell what material there is *not* in our compost heaps. For special purposes it may be necessary to observe some rules; but for general purposes of cultivation, all decomposable materials may be worked up into a fertilizing compound for trees and plants. Whatever may be said by chemists about the loss that manure undergoes by fermentation, we know by actual experience that it is unsafe to apply unfermented animal manure to living growing plants. For the garden and orchard it should be well decomposed, so that when applied it might be cut with a spade. The materials should all be collected and mixed, and frequently turned over during winter. If it is a year old before using it will be all the better. The farmer should have a separate heap for his garden and orchard.

Then, besides the manure heap, they are many articles that will be wanted in spring and summer. *Hot-beds*, for instance, for forwarding early vegetables; *frames* for the protection of tender or half-hardy plants; *stakes* for trees, dahlias, and other herbaceous plants; *trellises* and other designs for the support of climbing plants; *rustic baskets, labels, &c.*—all these may be made now, when nothing can be done out of doors. Then there are seeds to be cleaned and prepared, fruits to be taken care of, &c.

For reading and reflection, the great means of acquiring that taste and skill upon which all Horticultural progress depends, the winter affords glorious opportunities that every one should improve to the utmost. No branch of science or industrial pursuit requires so much reading — so much study — as that of Horticulture. There is at this time an excellent spirit abroad in relation to Horticulture. Its claims upon the attention of all classes of community are now very generally acknowledged, and the chief obstacle to its progress and successful practice, is the *want of knowledge*. Farm culture, defective though it be, is yet greatly superior as a general thing, to that of the garden. The arts of *grafting*, *budding*, *layering*, *inarching*, and other means of propagating trees and plants, that every man who has a garden should be familiar with, are understood by very few. The seasons and modes of sowing, gathering and saving seeds, planting, transplanting, and pruning, are all badly understood, and hardly understood at all by a large number of persons whose lives are devoted to cultivation. So it is with the preparation of manures, and the texture and improvement of soils.

Ignorance on these subjects would be excusable if there were no accessible remedy. But such is not the case. Books — and good books — treating fully on all these points, are cheap and abundant; and we take this occasion to suggest to those who wish to make their fruit and vegetable gardens and orchards profitable and creditable,—to embellish their homes with trees, shrubs, and flowers, as all homes should be, in this country particularly, to spend a portion of the leisure winter days and nights in culling from the current publications of the times such information as they may feel themselves in need of, in order that it may be carried into actual and profitable practice during the coming season of cultivation.

Address delivered before the Norfolk Ag. Society, on the occasion of its first Annual Exhibition at Dedham, Mass., September 6, 1849. By Hon. Marshall P. Wilder, of Boston, President of the Society.

The unusual early period at which the publishers find it necessary to issue the present number, leaves room at this moment merely to thank the author for his kindness in sending us a copy of this address. It is an elegantly printed pamphlet of 36 pages. The subject of Agricultural and Horticultural improvement are discussed with an ablilty and elegance of style rarely met with in such productions. The dignity and importance of agriculture—the application of science to farming—the importance and quality of manures—the arts of cultivation—and agricultural education are treated in a masterly manner. The author makes a general survey of our country, east and west—its wants and capabilities—and goes for New England against the world.

THE MAGNOLIAS.

AMONG the vast number of families of noble and beautiful trees with which nature has so bountifully clothed this continent, the Magnolia holds a prominent rank and deserves particular attention. In an ornamental point of view, we are inclined to place them among the first.

BROWN, in his "Trees of America," says truly that "the genus Magnolia embraces the most admirable productions of the vegetable world." LOUDON, in his Arboretum, describes eight American species and three from China and Japan:

1. GRANDIFLORA, or large flowered;
2. GLAUCA, or glaucous leaved;
3. TRIPETELA, or three petalled, or umbrella;
4. MACROPHYLLA, or long leaved;
5. ACUMINATA, or pointed leaved;
6. CORDATA, or heart leaved;
7. AURICULATA, or auricled leaved;
8. PYRAMIDATA, or pyramidal headed;
9. CONSPICUA, (YULAN, of the Chinese,) or conspicuous flowered;
10. PURPUREA, or purple flowered, (Japan;)
11. PURPUREA GRACILIS, or slender growing, purple flowered, (Japan;) besides many varieties and sub varieties of each, that European cultivators have produced by hybridization.

The Magnolias and our magnificent Rhododendrons, or "Mountain Laurel," are among the rarest and most highly prized ornaments of the parks and pleasure grounds of Europe. No pains or expense is spared to give them the soil, situation, and culture that will induce them to flourish, while here, at home, they are scarcely to be seen. How rare it is to see a fine specimen of a Magnolia! and yet it seems to us that every man who can plant half a dozen trees, should desire at least one. Next to the evergreen trees, such as the firs and cedars, we have a particular love for the Magnolia; and we hope to see the time when our country people, who are now planting the Horse Chestnut, Mountain Ash, Maple, &c., by sixes, twelves, twenties, and even hundreds, will remember that nature has kindly given them others, with which to give variety and beauty to their home scenery. There are at the present moment a vast number of trees planted around and in our cities and villages, and through the whole country; and if the selection of trees were made with more taste and judgment, how much greater would be the improvement! how much more interesting these little plantations in the streets and door-yards would be, not only to their possessors, but the public at large! If a man but plants trees of any sort, we are loth to find fault with him; but we must take this occasion to suggest to those who may be about to plant, to introduce a variety. The man who has a little town lot, and can plant only half a dozen to a dozen forest trees on the side walk opposite his house, should not plant all *Soft Maples*, or all *Buttonwoods*, or all *Horse Chestnuts*, or all of any other tree, because his neighbor may have done so. That little plantation is all that he and his family can enjoy daily of "nature's most beautiful production;" and why not make it as varied as possible? If we go to the woods for trees, why not get an *Elm*, a *Tulip tree*, a *Sugar Maple* and a *Soft Maple*, a *Linden* or *Basswood*, and a *Chestnut*, instead of half a dozen Maples or Buttonwoods. They may not be quite so easily obtained or transplanted, but only a trifling additional expense will be incurred.

It is not in man's nature to be delighted with a monotonous uniformity. A neighbor of ours has, on very small plantation, some sixty different sorts of forest trees. Another neighbor, who has recently built himself a large, costly, and commodious house, finished in the most complete and convenient manner outside, and intending to have a comfortable and beautiful home, sent a teamster to the woods and pulled up a number of shabby looking maples to plant on the side-walk before his door. The contrast is insufferable — annoying to the most common observers that pass along. And this was not economy; for most likely half of these maples will die and will have to be replaced, and those that happen to live will not in years give either ornament or shade; but it was not meant to be economy—for the man is of a liberal nature, and particularly so as regards things that pertain to his dwelling, — it was simply *a want of taste.* What a misfortune that people of taste are so apt to be poor and the wealthy so void of taste! But we have not space to dwell more at length on this subject now, and have only touched upon it incidentally; our purpose was to draw attention to the beautiful tribe of Magnolias — not to describe a long list of species and varieties, but a few of the more desirable sorts, adapted to our climate and easily obtained. These are, the ACUMINATA, GLANCA, TRIPETELA, MACROPHYLLA, CONSPICUA, PURPUREA, and SOULANGIANA.

These are all sufficiently hardy to stand the winter here (43°) without protection. The *Acuminata,* or Cucumber tree, which is found scattered over all the western portion of this State and in most of the Western States, is well known to every one who is at all acquainted with forest trees. It abounds on all wooded land on the banks of the Genesee. The finest specimens we have ever seen are on the timbered lands of Gen. BROOKS, in Canadea, Allegany county. Many are to be found there full eighty feet high and four feet and upwards in diameter, with clear branchless trunks till within a few feet of the top. What imposing objects they are! When grown singly on the lawn the branches are thrown out with great regularity, forming beautiful pyramidal trees. On young trees, and even those of large size if in a vigorous state on a suitable soil, the foliage is large, eight to ten inches long and half that in diameter. The flowers, which appear in May, are of a pale bluish color, three to four inches in diameter, and slightly odorous. Propagated from seeds that ripen.

Glauca. This abounds particularly in New Jersey, in moist and swampy ground, and is commonly known as the *Swamp Laurel.* It is a low branching tree, seldom exceeding fifteen to twenty feet in height: the leaves are five or six inches long, of a bright bluish green, and remain fresh until a very late period in the fall. The flowers, which appear in May and June, are white, odorous, and about three inches in diameter. When in flower, this is a beautiful tree. Propagated from seed.

Tripetela, or Umbrella Tree. This is a magnificent tree, abounding principally in Carolina and Georgia. It attains the height of 30 to 40 feet with immense foliage, 18 inches long, and 7 or 8 broad, and white, sweet scented flowers 7 or 8 inches in diameter, propagated from seed.

Macrophylla, or Large Leaved Magnolia. The immense foliage of this tree gives it quite a tropical appearance. In habit it resembles the Tripetela. It seldom exceeds 20 to 30 feet in height. There was once a fine little grove of these in the old Linnæan Nursery at Flushing, (now in the possession of Messrs. WINTER & Co.,) planted by the late WM. PRINCE, who did more in his day than any man in America to disseminate this beautiful genus. At one time his nursery contained nearly every species and variety that were to be obtained. This tree is found scattered sparcely over nearly all the Southern States. Its large foliage, grayish bark, and gray silky or velvetty buds distinguish it from all the others.—Flowers in June, 8 to 10 inches in diameter and quite fragrant. This species has always been scarce and dear in all the nurseries of both this country and Europe. If more attention be given to collecting seeds it might soon be easily enough obtained.

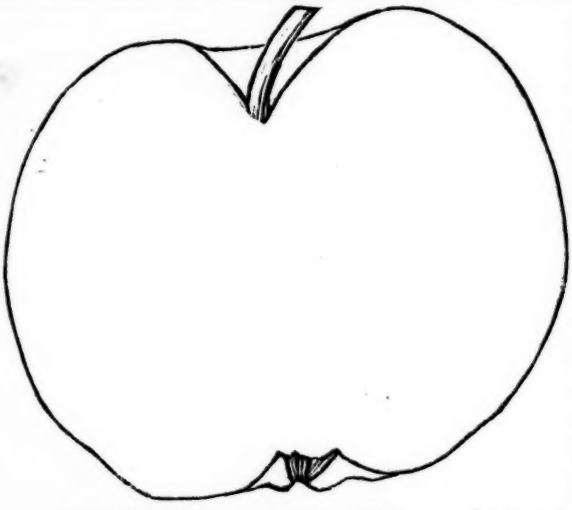
Conspicua, or Conspicuous Flowering (*Yulan* of the Chinese.) This is a native of China, and held therein the highest rank as an ornamental tree. In this country it ranks as a small tree or large shrub, but nothing can be more beautiful. Its flowers are pure white and appear in May, before the leaves, in the greatest profusion, even on young specimens. There are a few fine examples in this country, one of the finest is on the lawn of A. J. DOWNING, Esq., at Newburgh, a notice of which he has given in the Horticulturist. The habit of the tree is regular and pyramidal; leaves 5 to 6 inches long and 3 to 4 broad. LOUDON mentions one at Wormleybury, England, that in 1835 produced 5000 blossoms. It is usually propagated by inarching on the acuminata or purpurea—on the latter its growth is much dwarfed.

Purpurea, or Purple Flowering. This a small tree or large shrub, seldom attaining, here, 6 feet. It has large, dark green foliage, and purple flowers, which appear, like those of the Conspicua, before the leaves. It is more easily multiplied than most of the others, as it is increased by layers. There is always a good supply of it in the nurseries.

Soulangiana, or Soulange's Conspicuous Flowering Magnolia. This is a variety of the Canspicua or a hybrid between the Conspicua and Purpurea, raised at Fromont, near Paris, by the late M. LOULANGE BODIN. It resembles the Conspicua in all respects, but differs in having purple flowers.

We have not spoken of the *Grandiflora,* which is certainly the most superb Evergreen tree on this continent, or in the world, but requires protection in all the Northern States, and is consequently unsuited to general planting as an ornamental tree. Gentlemen who keep a gardener and can afford to give special attention to tender trees, should by all means enrich their grounds with at least one specimen. It is easily protected in winter by placing a box or board shed over it.

THE CHRYSANTHEMUM IN CHINA.—The Chrysanthemum is the Chinese gardener's favorite flower. There is no other with which he takes so much pains, or which he cultivates so well. His Camelias, Azaleas, and Roses, are well grown and well bloomed, but with all these we beat him in England; in the cultivation of the Chrysanthemum, however, he stands unrivalled. The plants themselves, seem, as it were, to meet him half way and grow just as he pleases; sometimes I met with them trained in the form of animals, such as horses and deer, and at other times they were made to resemble the pagodas, so common in the country. They are always in high health, and never fail to bloom most profusely in the autumn and winter.—*Gard. Chron.*



THE NORTHERN SWEETING APPLE.

Two years ago we saw this beautiful and delicious sweet apple, for the first time, exhibited at the Pomological Congress in New York, by JONATHAN BATTY, a respectable nurseryman of Keesville, N. Y. After tasting, we at once noted it as the *best sweet* apple we had yet seen at that season of the year, (October.) Others who then saw it, and who were fully competent to judge correctly, thought as highly of it as we did.

After our return from New York we were presented with specimens of the "Munson Sweeting" from a friend in Cortland Co., and it struck us at once as being identical with the "Northern Golden Sweet" of Mr. BATTY. This season we again saw it in New York, from Mr. BATTY; and our friend Mr. JESSE STORRS of Marathon, Cortland Co., sent us a small box of his "Munson Sweeting," which has confirmed our opinion as to their identity.

Mr. BATTY says it originated in the orchard of NATHAN LOCKWOOD, of St. George, Chittenden Co., Vermont, planted by his father more than sixty years ago. Mr. STORRS says it was brought into Cortland Co. from Massachusetts, and is probably known there as "Munson Sweeting." At the last session of the Pomological Congress, it was brought before the fruit committee, of which Dr. BRINKLE of Philadelphia was chairman, and Messrs. CHAS. DOWNING, C. M. HOVEY, and ROBT. MANNING, were members. The committee were much pleased with it, and suggested naming it "Northern Sweeting," leaving out Golden, as there is already an old and well known "Golden Sweeting."

This class of apples, called *sweet*, is much more sought for now than formerly, both for kitchen and table uses. There is scarcely a family now but seeks a small supply of sweet apples for cooking, and many persons prefer them, if good, for eating. We have several varieties of sweet apples here, many of them as large as small pumpkins and but little more palatable — their chief use is for feeding cattle. The *Pound Sweet* is of tolerable quality, bakes well, and makes good sauce. It is just now in season, and people are glad to get them at a dollar per bushel; but neither this nor any other that we know of in use now, cultivated here, can properly be called a *dessert* sweet apple. The *Bailey Sweet* is excellent, but its season is after the one we now notice. A fine sweet apple, fit for dessert or cooking in October and November, is therefore a great acquisition, notwithstanding the vast number of varieties now in cultivation. Such is the "Northern Sweeting." In the New England States it will undoubtedly succeed well, as also in New York and the Middle and Western States generally. Lovers of sweet apples will no doubt test it as soon as possible.

Size medium; form roundish, slightly angular or ribbed; stalk moderately stout, two-thirds of an inch long, in a pretty deep cavity. Calyx closed, segments long, in a pretty deep and slightly plaited cavity; skin smooth and fair, of clear yellow, becoming golden at maturity, with a red cheek; flesh yellowish, fine grained and tender, abounding with a rich, agreeable, saccharine juice; tree a vigorous grower and good bearer; season, October and November, and may be kept, we believe, through a considerable part of the winter.

THE CANANDAIGUA PEAR.

Catharine, erroneously, of Western New York.

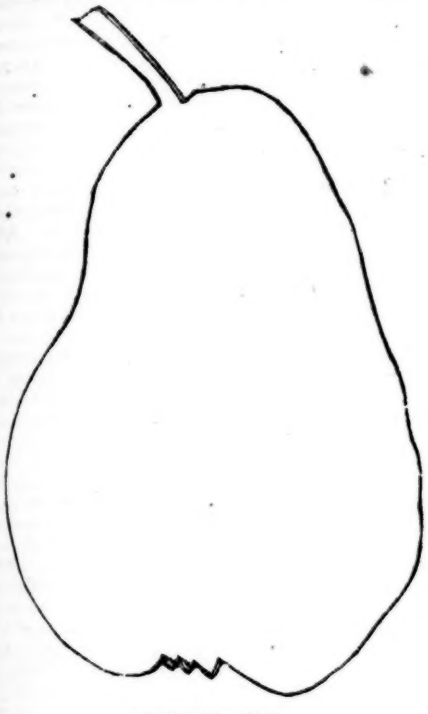
SOME seven or eight years ago, this pear was brought to our notice by HENRY FELLOWS, Esq.,* of Penfield, who has for a long time brought it to the Rochester market. At first sight, one would suppose it to be the Bartlett, but it is essentially different in many particulars of both tree and fruit. Mr. FELLOWS has fine old bearing trees, planted in 1812, being now between 30 and 40 years old. He informed us that he obtained his trees or grafts from the late Judge ATWATER of Canandaigua, who brought it there from Connecticut about the year 1806, or previous to that time. Until within a few years, this fine pear seems to have attracted very little attention here; but this is not at all remarkable, since it is but a short time since the White Doyenne (Virgalieu) was unmarketable, and left to the hogs or to rot under the tree; now they are hard to be obtained at $3 to $5 per bushel.

Up to this time this pear has been called by Mr. FELLOWS and others the "Catharine;" but this is evidently a misnomer, as there is an old and well known variety of that name. For this reason, and because it was said to be originally from Connecticut, we refrained from noticing it, expecting that it might be found cultivated in some other place under another name; but so far we have found no trace of it elsewhere. Recently it was exhibited at the Pomological Convention among seedling fruits from the neighborhood of Geneva, we believe, and the fruit committee to whom it was referred were much pleased with it, and suggested that it be called the "Canandaigua" pear, it being traced no farther than that place, and all the trees in Western New York having been obtained from that vicinity.

The history of this fruit is the same as that of the

* We shall obtain from Mr. FELLOWS some facts in his own experience with the culture of this pear. He and his sons are proprietors of a nursery at Penfield, in this county.

"Swan's Orange" or Onondaga, and is quite singular — both are traced to Connecticut, and yet neither of them are now to be found there. It may possibly be that both were seedling varieties that never had more than a local existence in Connecticut, and have entirely disappeared there now, and are perpetuated



CANANDAIGUA PEAR.

only by a single graft being brought into this country by early settlers from the immediate neighborhood of the parent trees. The *Canandaigua* is so much like the Bartlett, that if its history were not nearly as ancient, we should suppose it to be a seedling from it. As the matter stands, this is hardly possible.

In size it is usually medium, sometimes large, pyriform, slightly irregular, surface rather uneven; skin fair and smooth, of a pale yellow; stalk about three-fourths of an inch long, usually inserted somewhat obliquely; calyx open, very slightly sunk; flesh white, fine grained, buttery and melting; ripening from first to the middle of September; the tree is a vigorous and beautiful grower, both on pear and quince stock, and a good bearer every year.

DOMESTIC PINE APPLES.—The National Intelligencer states, that on Saturday, in the Washington Centre Market, Mr. Howlett, of that city, gardener and florist, exhibited a number of pine apples of his own raising, from the crowns of the foreign fruit, which were thrown into the street, and picked up there about a year ago.

"IN time of peace prepare for war," is an old maxim, and has done mischief — in winter prepare for summer, is a new maxim for the horticulturist, and will do good.

THE FALL PIPPIN.

MR. EDITOR:—It is not my design to engage in any pomological controversy. But I do not like to see the *old* "Fall Pippin" thrust out of any orchard to make room for any other apple; it is an old favorite of mine, one with which I have been intimately acquainted for more than forty years. I have spent many an hour in rambling among a number of large trees in "Old Dutchess," selecting the best apples I could find, such (as an old miser said with his money) as would do your eyes good to gaze upon. But I know of only two trees in western New-York that bear the same kind of apples, though there is a multitude of apples, in almost every orchard in every place that I am acquainted with that are called *Fall Pippins*, quite distinct from the Fall Pippin; yet I think good judges might take selected specimens of them at a certain state of maturity to be the true Fall Pippin.

The true Fall Pippin is generally larger, more yellow, more tender, less acid, not quite as long in proportion to its size, but not as good to keep. I think it would be far more difficult to keep them till the 1st of January than one of the so called Fall Pippins till the middle of February. Mr. Downing has a good description of the Fall Pippin in his work on fruits.

I intend to visit those two trees this winter, though some 14 miles from this place, to cut some Grafts from them and will send you a few, if you wish.

Where can I find some Sea Kale seed, and Pansy seed from choice varieties? STEPHEN HALE.—*Clyde, Nov.* 24, 1849.

Our correspondent will find no one, we think, who will dispute with him the merits of the *Fall Pippin*. In our opinion it has no superior if an equal of its season. The kind referred to is that known through this section as *Holland Pippin*, (but not the Holland Pippin of Mr. Downing,) a magnificent oblong apple, same texture and quality as the *Fall Pippin*. It keeps till March, and answers the description of the *White Spanish Reinette*, described by Mr. Downing and several European works. The tree in its growth &c., is a *fac simile* of the Fall Pippin.

Sea Kale seeds are usually found at the seed stores. Pansy seed of a choice variety is very difficult to obtain in this country.

ANSWER TO CORRESPONDETS.

WILL you please name the best 25 sorts of MARKET APPLES to be planted *solely for profit*, composed of 6 *Summer*, 4 *Fall*, and 10 *Winter* varieties?

Will you also state what varieties of PEARS are *most* and which *least* liable to blight with you? F. K. PHŒNIX. *Delavan, Wisconsin.*

REMARKS.— For profitable orchard culture in this region, we would choose,

Summer.—Early Harvest, Red Astrachan, Early Strawberry, American Summer, Sweet Bough, and Golden Sweeting.

Fall.—Gravenstein, St. Lawrence, Fall Pippin, and Jersey Sweeting.

Winter.—Rhode Island Greening, Yellow Bellflower, Baldwin, Esopus Spitzenburg, Roxbury Russet, Golden Russet, Pomme Gris, Northern Spy, Bailey Sweet, and Talman Sweet.

The selections above are made with a view to *profitable culture*, taking into consideration the vigor and productiveness of the tree, size, appearance, and keeping qualities of the fruit. Our own observations incline us to believe that no one variety of Pear is more liable to the blight than another.

Ladies' Department.

WE had designed to talk on various matters in this department; but we think the space is occupied to good advantage as it is. In our next, and subsequent numbers, we shall present thoughts and facts, important to the health, comfort and happiness of our fair readers. In this department we shall also have the assistance of several female writers, whose ability can but add interest and value to our paper.

SALLY SLY AND JENNY McKEAN'S BUTTER.

Joe's wife was Sally Sly — when a small girl she was sly — she would not half wash the milk pail and sly it away and let it sour. She was sly at school and did not half get her lessons, but would have her book in sight when reciting; but as she grew older she learned that to get well married she must appear well, and so she bent all her cunning to get a superficial education in every thing, from roasting a potato to playing a piano. Poor Joe fell in love with her, and "love has no eyes" — so he married her. But soon after she entered on housekeeping, his eyesight came, and he saw his fix that it was "for better or for worse;" and he thought it was all for worse.— Like a true philosopher, he concluded to endure what he could not avoid nor cure, and got along tolerably well only when he came to her butter — for his mother was a real butter-maker. Every time he saw or tasted of Sally's butter he felt the horrors. Her manner of making butter was something as follows: she thinks it of no consequence whether the milk pail is sweet or sour — sets the milk in a warm room, because it is easier than to go in the cellar, and if some dirt should blow into the pans she thinks every man must "eat a peck of dirt," and no place will it slip down easier than in butter — she lets the cream pots be open, and when she churns forgets the poke; leaves the cream nearly at blood heat that it may come quick. When she takes it out of the churn she picks out the bodies of all flies and spiders — the legs and wings are so small they can be swallowed. She works out half the buttermilk and sets it away in a warm place for use. Poor Joe has seen so much butter of this kind that he declares butter does not agree with his health, and will not taste it. Yet his wife wonders why he does not try it, and marvels why he does not keep a dairy, and make butter for market.

Jonathan was a young brother of Joe, and he had occasion to eat at his brother's enough to know why he could not eat butter: and he declared he never would marry without knowing what his bread would be buttered with. Following the bent of his fancy, he made several attempts at matrimony, and Julia Juniper almost caught him, for there was always good butter on the table at tea, but he was determined to know who made it. On inquiry, she says, "La me! mother makes the butter: I take lessons on the piano." "Well," says Jonathan, "I want a wife that takes lessons on the churn — I shall look further." After several unsuccessful attempts, and just ready to despair, he started in pursuit of stray cattle, before breakfast, and wandered across the forest into the corner of the next town, and weary and hungry called at a decent looking house and asked for some refreshments, which was most cordially granted, for the family were what were called Scotch-Irish — in religion, Presbyterian, and in hospitality boundless.

Here he found the butter exactly right — though the weather was hot, the butter kept its shape as well as beeswax. He catechised the old lady about her housewifery — for the bread was as right as the butter. The old lady said her health was feeble — she could do but little, and Jenny had the whole management. He made some round-about inquiries concerning Jenny, and learned she was a hearty, black-eyed lass, of about two and twenty; had never seen a piano nor attended a ball — but knew the Assembly's catechism; could sing Old Hundred to a charm — spin flax and darn stockings, and was then gone to town with butter. He lingered, but she was delayed, and when his excuses for staying were all exhausted he started. He conld not get the good butter out of his mind, and how it happened I know not, he soon found his way there again, and the result of his adventure was he made a wife of Jenny McKean. And now one lump of his butter is worth more than all Joe's would make in a month. There's no trouble in going to market — the keepers of genteel boarding houses in the neighboring village send and take it at the highest market price.

Now the main difference in these two women arises from the manner of training, though there is no difference in natural disposition. Old Madam Sly never looked on to see that Sally done up her work right, but suffered her to sly off her work as she chose, and though a good housekeeper herself, was altogether too indulgent, and like some other mothers, thought more of getting Sally well married than of making her fit for a wife — while old madam McKean was determined Jenny should be fit for any man a wife, whether she got married or not. Perhaps there is no more certain criterion by which to judge of a woman's general character for neatness and good house-keeping than by the quality of her butter. Find on the farmer's table a good, solid, properly salted, well worked slice of butter, and you need not fear to eat the pan-cakes or hash; but if you see a splash of half-worked butter — salt in lumps and a sprinkling of hair and flies' legs, you may be sure, if you board there long, death will not be obliged to wait for you to finish your peck of dirt.

"HOUSE AND HOME"

What's a House? You may buy it, or build it, or rent;
It may be a mansion, a cottage, a tent;
Its furniture costly, or humble and mean;
High walls may surround it, or meadows of green.

Tall servants in livery stand in the hall,
Or but one little maiden may wait on you all;
The tables may groan with rich viands and rare,
Or potatoes and bread be its costliest fare.

The inmates may glitter in purple and gold,
Or the raiment be homely and tattered and old;
'Tis a house, and no more, which vile money may buy;
It may ring with a laugh, or but echo a sigh.

But a Home must be warmed with the embers of love;
Which none from its hearthstone may ever remove;
And be lighten'd at eve with a heat-kindled smile.
Which a breast, though in sorrow, of woe may beguile.

A home must be "Home," for no words can express it,—
Unless you have known it, you never can guess it;
'Tis in vain to describe what it means to a heart
Which can live out its life on the bubbles of art.

It may be a palace, it may be a cot,
It matters not which, and it matters not what;
'Tis a dwelling perfumed with the incense of love,
From which to its owner 'tis death remove.

Youths' Department.

FEW of the youth in the country, we fear, appreciate or improve the advantages they enjoy — particularly those afforded by the long winter evenings. The youth in our cities, at most trades, have to labor as long, and longer, in the winter than at any other season. The evenings are not their own, but their employer's. In the country the winter is a season of leisure. The farmer's son and daughter employ the evenings as best suit their inclination. What an opportunity this affords for mental improvement — a rare chance to gain that knowledge which shall prepare them for respectability and usefulness in the world. A young man, by the assistance of such books as all can procure, in three or four winters can lay up a stock of knowledge that shall prepare him to act well his part as a farmer and citizen — a knowledge that will give him an influence over less intelligent neighbors, and if rightly used will advance the best interest of the country, and the good of all.

It is for every young man and every young woman to decide whether this golden opportunity shall be improved — these evenings well spent; or, whether they shall be wasted, or worse than wasted in idleness and frivolity. We would not detract from your pleasures — far from it; the pleasures of knowledge surpass any pleasure afforded by the too common amusement of the young. The fields of science afford solid pleasure — they furnish new sources of delight at every onward movement — they are strewn with flowers at every step. The pleasure of science is, perhaps, the only earthly exception to the words of the poet, that,

"Each pleasure hath its poison, too."

In the pages of the FARMER we can only hope to arrest the attention of the YOUTH, and then bid them go on, furnishing them facilities, as far as possible, to help them search for knowledge — ever holding up the encouragement that INDUSTRY and PERSEVERANCE in a right cause ensures success.

HINTS.—When I see a man hanging around the store, shop or taven, or loitering about home, because he has nothing to do, I am apt to think he likes company better than work, and is unwilling to work for what he can earn, that he promises to work for more persons at a time than would be best, and that he could find those in his neighborhood who would be glad to hire him to work, in order to obtain their just demands. I am apt to think, too, that he owes for some pig, bushel of corn, a few pounds of pork, house rent, or some other necessary, which on quarter-day will look rather squally. But I am apt also to think, if he becomes punctual in paying these little debts, faithful in his business, not extortionary in his wages, punctual in all his promises, and rendering himself useful to his employers to the best of his abilities, that he would be apt to find his business on the increase, wages improving, *less sauntering*, a firm demand for his labor, an increase in his pocket, a sweeter nap at night, a pleasanter wife, and withal — and what is best of all — a clear conscience.—*Boston Cultivator.*

LOVE OF FAME.—The love of fame not regulated by principle, is more dangerous to the welfare of society than the love of money.

COUNTRY GIRLS.

MRS. SWISHELM, of the *Pittsburgh Visitor*, has written some very fine things. We extract the following from her *Letters to Country Girls:*—

"Well, girls, I know that, let others do as they will, you have to work, for if you do not, you would not be worthy the name of country girls. The drawling concerns who lounge round reading novels, lisping about the fashions and gentility, thumping some poor hired piano until it groans again, and putting on airs to catch husbands, while their mothers are toiling and boiling in the kitchen are not often met in the country. This class of girls are generally confined to cities; and you would be surprised to know how many of them are here. There are hundreds of girls in every large city who parade the streets in feathers, flowers, silks and laces, whose hands are soft and white as uselessness can make them, whose mothers keep boarders to get a living for their idle daughters. These mothers will cook, sweep, wait on table, carry loads of marketing, do the most menial drudgery, toil late and early, with very little more clothing than would be allowed to a Southern slave, while their hopeful daughters spend their mornings lounging in bed, reading some silly book, taking lessons in music and French, fixing finery, and the like. The evenings are devoted to dressing, displaying their charms and accomplishments to the the best advantage, for the wonderment and admiration of knights of the yardstick, and young aspirants for professional honors—doctors without patients, lawyers without clients—who are as brainless and soulless as themselves. After awhile the piano-pounding simpleton captivates a tape-measuring, law-expounding, or pill-making simpleton. The two ninnies spend every cent that can be raised by hook or by crook—get all that can be got on credit, in broadcloth, satin, flowers, lace, carriage, attendance, &c., hang their empty pockets on somebody's chair, lay their empty heads on somebody's pillow, and commence their empty life with no other prospect than living at somebody's expense—with no other purpose than living genteelly and spiting their neighbors.—This is a synopsis of the lives of thousands of street and ballroom belles, perhaps some of whose shining costumes you have envied from a passing glance. Thousands of women in cities dress elegantly on the streets, who have not a sufficiency of wholesome food, a comfortable bed, or fire enough to warm their rooms."

EARLY RISING.—Are you poor? you will probably forever remain so, if you habitually waste the precious hours of the morning in bed. Who will seek the labor or services of him who sleeps and dozes in the morning until seven or eight o'clock? If such a person is poor, he must remain poor. "He that would thrive must rise at five." The poor can ill afford to lose daily two or three hours of the best portion of the day. Economy of time and dilligence in business, are virtues peculiarly appropriate to those who depend upon their earnings for the means of subsistence. Allowing twelve working hours to a day, he who by rising at eight instead of five o'clock in the morning, thereby loses three hours labor daily, parts with one fourth of his means of supporting himself and family: ten year's labor lost in the course of forty years!—*Boston Cultivator.*

The idea about the want of time is a mere phantom.

Spirit of the Agricultural Press.

FATTENING ANIMALS.—A memoir was read to the Academy of Sciences at Paris, by M. M. Dumas, Boussingault and Payan, "Of researches on the fattening of animals, and on the formation of milk." These philosophers announce their belief that fatty matters are formed in plants alone; that they thence pass, ready formed, into the bodies of herbiviri, entering the chyle duct by the lacteals, and so passing into the blood; that the first degree of oxidation forms stearine or oleac acid; a further degree produces the margaric acid which characterizes fat; a still further degree the volatile fatty acids — in opposition to Liebig, who traces the origin of fat to the sugar or starch of the food. In confirmation of their views, they show that hay contains more per cent. of oleaginous matter than is produced in the butter from a cow fed on this hay; and that cows fed on potatoes, or other roots poor in fat, produce much less butter. They advance an influence, which bears much on rural economy, that a cow eliminates twice as much fat from a given quantity of food as does an ox; and hence the commerce of milk and butter deserves a high degree of attention. Some relative experiments on fattening pigs bear out the same general principles.—*Pol. Review.*

SUBSOIL PLOWING.—Ex-Governor Hill states in the *Visitor*, that he has found great benefit from subsoil plowing on the "driest plains" near Concord, N. H. He states that in a field of potatoes on these plains, the past season, he found the length of the potato vines "sure index of the depth of the plowing." Wherever the ground was cheated of the subsoil plow, upon a balk, or in the field, the vines were as much shorter, as the soil was stirred a less depth." He gives the result of an experiment in subsoiling made several years since. The ground was plowed with a surface plow, eight inches deep, and a subsoil plow run in each furrow eight inches deep. He left two strips, a yard wide, not subsoiled. He had taken six crops from the field—three of grass, one of oats, one of corn—and the inferiority of each crop on the portions not subsoiled was apparent, and could be seen at the distance of forty to fifty rods. The subsoiled part gave from two to three tons of hay to the acre.

STARCH FROM INDIAN CORN.—The Ohio Statesman informs us that large quantities of starch are made from this grain in that State. An establishment near Columbus is said to use 20,000 bushels of corn annually for this purpose. No attention is now paid to the color of the corn, as by the improved modes of manufacturing, as light-colored starch is produced from the dark-colored varieties, as from white.—The quality of the starch here made is said to be superior, commanding a higher price in New-York and New-Orleans than that made from wheat. The offal of the grain is feed to hogs, and at the manufactory alluded to, 500 to 600 head are annually fattened.

POTATO DISEASE NOT CAUSED BY INSECTS—Mr. Curtis, a distinguished English entomologist, has just published a volume in reference to insects which attack the potato.—Speaking of the malady which has prevailed so extensively in potatoes for several years, he remarks—"Amongst the numerous causes which have been assigned for the appearance of this alarming and severe visitation, insects have been frequently taxed as the destrutive agents; but I am convinced the calamity is not to be attributed to their presence." He admits that there are many species of insects which prey upon the potato in its various stages; but he thinks there is no evidence that their attacks are in any way connected with what is called the potato disease.—*Albany Cultivator.*

HOUSES OF UNBURNT BRICKS.—Houses of unburnt bricks may be made perfectly wind and water proof by being covered externally with a thin coat of mastic, which is prepared by mixing very coarse, sharp sand, or sifted road drift, with dry White Lead and Lithargee, beaten up with Linseed oil, and rendered sufficiently soft to work well with a trowel. This plastering becomes in a short time, so hard as to resist a nail, and will stand for an age without cracking or needing repair. For inside plastering, sharp sand and lime mortar is sufficient; papering the walls when dry.—*Boston Cultivator.*

THIS IS A GREAT COUNTRY.—A correspondent of the New York Times states that, according to the report of the Commissioner of the General Land Office, that part of the United States territory not yet formed into States, will make *forty-six* States as large as Pennsylvania; each of which will contain *twenty-eight millions of acres.*

HESSIAN FLY AND GOOD WHEAT.—J. Oglesby, in the Pennsylvania Cultivator, states that he had a nine acre lot, from which he obtained 60 bushels of oats, the rest of the crop being briars, sumac, sassafras, Canada thistles, poke, elder, and nearly all other kinds of weeds. When the oats were harvested, the bushes were grubbed, and the weeds cut with a scythe. When perfectly dry, they were burned in a strong wind, as they lay over the ground. The nine acres then received 700 bushels of lime—the land was well plowed—and the next year it yielded 390 bushels of good wheat, untouched by the Hessian Fly, the fire having destroyed them.

VENTILATING BRICKS.—The London Builder says there has been registered in the Patent Office a brick so shaped that when two are placed end to end a circular space is left at the junction. This circular space connecting from course to course, a wall formed with them is, to a certain extent, hollow, and admits of currents of air through it either heated or otherwise. Each brick is nine inches square and three inches thick, the size of two common bricks.

We saw, the other day, some nice, large, healthy looking potatoes, which were grown in the center of a heap, of hard coal ashes. The height of the heap, to say nothing of the soil, if such it could be called, seemed most unfavorable to production of any kind, yet we have seldom seen finer potatoes raised under the most favorable circumstances. It may be thought that the value of coal ashes in agriculture is yet to be understood.—*Cambridge Chronicle.*

CELLARS FOR MANURE.—The claimants for the premiums on farms, offered by the Middlesex (Mas.) Agricultural Society, generally speak highly of the advantages of keeping manure in cellars. R. Chaffin states that he considers one load of manure composted in the cellar under his barn, worth three which have been exposed to the action of frost, rain, evaporation, &c. His cellar is closed, excluding the frost and rain altogether. His cows are kept in the barn, nights, all the year; their manure goes into the cellar where hogs are kept to root over the different materials, and mix them into a compost.—*Albany Cultivator.*

A NEW MACHINE.—A model of a machine called *The Bran Duster*, was exhibited at the Fairs held in this city in October, of which we had the opportunity of witnessing the operation, and which we deem worthy the attention of millers. This machine will, in every 100 barrels of flour, make 4 bbls. more which escapes with the bran, by the usual modes of grinding. The saving is thus easily calculated, and will be found an item of no inconsiderable amount. The machines sell for $300 to $400, and no doubt will soon be adopted by every miller. We understand that they are about being placed in some of the mills near this city, It can be seen in operation at the Turning establishment of Mr. Stowe, in Uhler's Alley.—*American Farmer.*

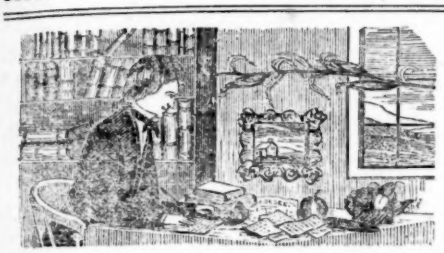
FLAX CULTURE.—Mr. J. Galbraith, of Wisconsin, has undertaken to introduce the cultivation of flax into that State. He has been about two years in Wisconsin, and is well versed in the methods followed in Ireland, Holland and Belgium. His first trial was made at Musquinago, with 50 acres, and this year he has harvested the products of 100 acres. The fabric is stated to be quite equal to that of Irish and Belgian flax.—*Farmer & Mechanic.*

IMPORTANT DISCOVERY.—A surgeon of Gottingen has discovered a complete antidote to arsenic. It is peroxyde, or the red oxyde of iron, twelve parts of which neutralize one of oxyde of arsenic. Experiments with this antidote have been tried upon rabbits and other animals with complete success. One advantage of it is that no injury can be done by too large a dose. In cases where too large quantities of arsenic have been taken, it has been found useful first to encourage vomiting.

PROVISIONS FROM AMERICA.—During the last twelve months there were imported into Liverpool alone from the United States, 26,000 tierces beef, 37,000 barrels pork, 224,000 cwts. bacon, 15,000 hams, 50,000 barrels lard, 100,000 boxes cheese, 8,600 firkins butter. The value of the above is £1,000,000 sterling.

LARGE CROP OF BEETS.—We have received a bushel of nice and large Blood Beets, as a specimen of the crop raised by Mr. Turner, of the Insane Hospital in this town. Mr. Turner raised this season one hundred and sixty bushels of these beets on fifty-six rods of land.—*Maine Farmer.*

IRISH SETTLEMENT.—Rev. Mr. Dove, of Ireland, has bought 20,000 acres of land in Cattaraugus Co., N. Y., and gone home to bring the population to settle on it.



Editor's Table.

We think none of our subscribers will complain of either the contents or the appearance of this number, although we have not made it as good as we shall make the succeeding number. We hope our friends will make an earnest effort to increase our circulation in their respective neighborhoods. Show the paper to your brother farmers—form a club—collect the *three* shillings and forward with the names.

Scene at our Office.—An intelligent looking, and apparently "well off" farmer of this county entered our office, when the following dialogue occurred.

Farmer—I want the December number of your paper.

Editor—You will perceive that this is the last number of the present year—I suppose you will renew your subscription for the next year.

Farmer—I merely called to get Mr.——'s paper I don't take the Farmer myself.

Editor—Don't you think it would be to your advantage to take the Farmer, and read it.

Farmer—I think I can plow and raise wheat as well as my neighbors who read the Farmer and sometimes I think better than most of them.

Editor—Suppose I grant that you can raise wheat better than *any* of your neighbors—I suppose you have some plan—some good method for doing so not known to them. Now don't you consider it your duty as a good cilizen and neighbor to make this successful plan known.

Farmer—I am always willing to give my neighbors the benefit of my experience—indeed I consider it a duty, and I flatter myself I have done not a little good in this way.

Editor—I am glad you ackowledge your duty in this respect. Now if it is your duty to give the few you daily come in contact with the benefit of your experience, and you can do good in this way, how much greater is the duty to throw the light of your experience before the *one hundred thousand* readers of the Farmer; and how much greater will be the amount of good you can do in this way.

Farmer—I never wrote a line for a paper in my life, but I believe I will take the paper any way.

Editor—You must write, too,—give us the facts, no matter how, and we will put them in shape.

Farmer—I beleive I'll try.

Monroe County Ag. Society.—The annual meeting of the Monroe County Agricultural Society was held at the Court House in Rochester on the 11th of December. Premiums on field crops were awarded as follows: to Henry B. Moore, Brighton, first premium on corn; Ira Apthorp, Riga, second. L. B. Langworthy, Greece, first premium on carrots.

E. K. Hobbie, of Irondequoit, was elected President; N. Haywood, Brighton, 1st Vice President; F. P. Root, Sweden, 2d Vice President; John Row, Riga, 3d Vice President; Joseph Alleyn, Recording Secretary; James Vick, Jr., Cor. Secretary; and John Rapalje, Treasurer: Elisha Harmon, D. D. T. Moore, and John Rapalje, delegates to attend the annual meeting of the State Society at Albany.

An Agricultural Club has been formed in the town of Rush, in this county, of which Joseph Sibley is President. A club has also been in existence some time in the town of Webster. This is right. We think town clubs essential to the efficiency of County Societies. Our plan is for each County Society in which there are no town clubs, to take means to establish them in each town auxiliary to the County Society, making the President of each an *ex-officio* member of the County Executive Committee. The interests of town and county Societies would thus become one, as their objects are one. We make this suggestion for the consideration of those who are endeavoring to form or sustain agricultural associations.

Our Office.—We shall be happy at all times to see our friends and subscribers at our office. We keep files of all the Agricultural and Horticultural publications of this country, and many European works. They are always ready for the inspection and perusal of our freinds. We hope those who can make it convenient will make us a call, as we are always "at home". We will give any information, and render any service in our power, in procuring seeds, implements &c., or in any way in which we can advance the cause in which we are engaged.

Engravings.—The beautiful engravings in our present number were most of them designed and all executed by Mr. E. Baldwin, of this city. His work will be a better recommendation than any we can give. He is prepared to execute drawing and engravings of implements, stock, &c.

Tea Culture.—The New York Tribune has late advices from the tea plantation of Mr. Junius Smith, at Greenville, S. C. His plants are in blossom, and as healthy and flourishing as those of China at the same stage of growth. Every thing looks favorable, and Mr. Smith feels abundantly encouraged. He expects to place fresh tea upon the tea-tables of London and Paris in 20 days from his plantation.

Mr. Smith is a sanguine man. We fear he will find that labor is too high in this country to compete with the Chineese any better in producing tea than in growing silk. If cotton was down to four cents a pound instead of selling at ten, as it now does, tea might be raised and put up in the old planting States. The freight on a pound of tea from China is not over one or two cents, at most; and its first cost is all in the cheapest kind of human labor.

We are indebted to the author for a neat pamphlet containing an address delivered before the Buck's County (Pa.,) Ag. Society, by J. S. Skinner, Editor of the "Plough, the Loom and the Anvil." We extract one of the best passages in the address.

"Much better would Congress be employed in erecting a monument to Washington, in the establishment of a bureau as recommended by him, to enlighten the government in respect of its agricultural rescources and interests, than in rearing perishable piles of stone and mortar, vain memorials, when built in honour of one whose fame already extends to the utmost verge of civilization, and will endure as long as the love of liberty shall remain unextinguished in the hearts of men.

"At a meeting of the London Horticultural Society, Nov. 6th, a paper was read from H. Dobree, Esq., of Beau Sigour Gurnsey. It stated that at the last Gurnsey fruit show, a Chaumontel Pear of perfect shape, and of the remarkable weight of 2 lbs. 4¼ oz. Engish welight, was exhibited by his neighbor, Mr. T. A. Corbin.

"Some years ago Mr. Dobree transmitted a Chaumontel Pear to the Society, of the weight of 1 lb. 13¼ oz. English weight, being the heaviest which had hitherto been produced in the Channel islands. The pear produced by Mr. Corbin, grew on a quince stock, and no artificial means were employed to increase the weight of the fruit, of which there was in addition a fair crop on the tree. The soil is a deep, strong, brown loam, which is occasionally manured."—*Gard. Chron., Nov.* 10.

The Chaumontel Pear of the Channel islands, Jersey and Guernsey, are famous all over Europe. Under ordinary cultivation a pound is not an unusual weight, but 2lbs. 4½oz., is certainly extraordinary. Such an instance as this is useful as showing what results may be obtained with certain varieties, where stock soil and situation are all favorable. In this country the Chaumontel is an early winter fruit of the first quality.

Elihu Burritt, the Learned Blacksmith, and the able champion of Peace, has just returned to the United States from Europe. A public meeting was called for his reception in Worcester, Mass., of which the Mayor was chairman. On taking the chair he gave a brief address, from which we take the following beautiful paragraph:

"A few days since I stood by the monument which marks the spot where the first enemy fell in the war of the Revolution. As I stood by that monument the question occurred, when will monuments be erected to commemorate the victories of Peace? And as I looked around me and saw each hill-side covered with the fruits of civilization, each valley filled with flocks and herds, each village with the cultivators of the earth, and each city with its smiling inhabitants, I felt that my answer was received, and that the monuments of Peace were already erected."

Arnold's Patent Sash Lock,

THE BEST ARTICLE of the kind ever offered to the public. by several hundred per cent It is extensively used—universally admired, and highly recommended wherever known. The Patentee received at the recent State Fair in Syracuse, the Diploma of the State Society, (which is the highest premium on such articles,) accompanied by the following commendatin from the Committee. "Arnold's Patent Sash Lock, an article of great simplicity and extreme cheapness of cost, and operating with unerring certainty. The Committee commend it to all who need the article, as the Ultimathule of Sash Lock inventions." The well known Chairman of the above Committee, Lyman B. Langworthy, Esq., very justly remarked that I had nothing to fear from any other Sash fastener—that the principle of this is the only one that is right. This was the almost universal opinion expressed at the Fair. I know of but one exception, and that was an individual deeply interested in another article for the same purpose. The Editor of the Rochester American was at the Fair, and in noticing in his paper the various articles exhibited, uses the following language:—

"Wm. E. Arnold exhibited his admirable Sash Lock, which for simplicity and utility has no equal or rival."

The Syracuse Star, as well as numerous other papers have expressed the same sentiment. The Ontario Repository, says:—"A large number of these Locks have been attached to windows in this village, (Canandaigua,) and we hear but one opinion expressed in relation to them, and that is of unqalified approval."

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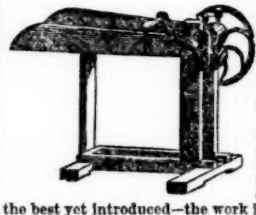

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Brockport, December 25, 1849.

CERTIFICATES.

BURDEN, Nov. 12, 1849.

Messrs. Seymour, Morgan & Co.—In my harvest, last season, I used one of your Improved Grain Reapers. I had formerly used one of McCormick's Improved Virginia Reapers, I have had considerable knowledge of them. In comparison, I think yours decidedly preferable; firstly—in point of perfection in cutting, which is the great desideratum, it is far in advance of his and next, in ease of operation, I think it has decided advantage. I did not obtain your Reaper until a large part of my harvest was completed; consequently I had not an opportunity to test the amount that could be cut in a day, still I am satisfied that it is capable of cutting from fifteen to twenty-five acres per day, and that, too, in the most perfect manner. I used no change of team. I did not find it necessary in doing an ordinary day's work—about fifteen acres per day. I tested your machine in wet grain and when there was grass at the bottom; here I found it had a great advantage over other Reapers in use, it being able to go through almost any grain some badly lodged, without any apparent difficulty of clogging the knife. And from my experience I think it a valuable labor-saving-machine, and would cheerfully recommend it to the attention of farmers, as I think grain can be cut with it, all expenses counted, at half the cost of cutting it the ordinary way—Wheat can be bound and shocked in a better manner, and with less labor, besides a great saving in the waste of grain.

Yours &c. F. P. ROOT.

I saw the aforesaid, Seymour & Morgan's Improved Reaper, in F. P. Root's harvest field and do concur in the foregoing statement. WM. ROOT, Esq.

D. H. ROOT.

I have seen the Machine work in very heavy, and also in wet wheat where it performed well, and believe it to be an improvement upon McCormick's Reaper. There was no clogging, as in the case of McCormick's and it must be a good machine if well made. NATHAN LOCKE.

BROCKPORT, Nov. 13, 1849.

Messrs. Seymour & Morgan:—Gents—I used one of our Improved Reapers in my harvest, which worked better than any I have seen before used—cutting wheat when there is much grass, without choking, which other machines that I have used would not do—I have had much experience with Reapers—having purchased the first one of McCormick's brought to this State. I have since put a large number of McCormick's in operation at the West, and I believe yours to be the most perfect Reaper now in use.

A. CHAPPELL.

I used one of Messrs. Seymour & Morgan's Reapers last harvest, and cheerfully recommend it to Farmers as the best machine within my knowledge for cutting grain. GEO. H. ALLEN.

BROCKPORT, Nov. 12, 1849.

This may certify that I used in my harvest of 1849, Seymour & Morgan's Improved Reaper, which worked to my entire satisfaction; cutting grain in all conditions. I believe it cannot be clogged in either grassy or green wheat. I have witnessed the operation of other Reapers now in common use and I believe it to be superior to any that I have seen—cutting wet or grassy wheat where other Reapers cannot. F. W. BREWSTER.

BROCKPORT, Nov. 12, 1849.

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December, 1849. *Rochester, New York.*

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